United Nations A/67/317

General Assembly

Distr.: General
17 August 2012

Original: English

**Sixty-seventh session**
Item 20 (h) of the provisional agenda*
**Sustainable development**

# Harmony with Nature

## Report of the Secretary-General

*Summary*

The present report is submitted pursuant to the request of the General Assembly in its resolution 66/204. As also requested by the Assembly in that resolution, on 18 April 2012 the Secretary-General convened the second interactive dialogue on Harmony with Nature to commemorate International Mother Earth Day and to contribute, actively and effectively, to the preparatory process for the United Nations Conference on Sustainable Development, which was held in Rio de Janeiro, Brazil, from 20 to 22 June 2012. The report focuses on the evolving relationship of humankind with nature and draws upon key issues discussed at the interactive dialogue, particularly in the area of science and economics. Concrete recommendations are provided to facilitate further consideration of the theme by Member States.

* A/67/150.

12-46756 (E) 210912

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# Contents


| | | Page |
|---|---|---|
| I. | Introduction | 3 |
| | Harmony with Nature website | 3 |
| II. | Human interaction with the Earth | 4 |
| | A. Evolution of the massive and escalating human impact on the Earth | 5 |
| | B. The Anthropocene: a new epoch in geological time | 6 |
| III. | Transformation to a life in harmony with nature | 8 |
| IV. | Ethical basis for a relationship between humanity and the Earth | 13 |
| V. | Conclusion | 14 |
| VI. | Recommendations | 15 |

# I. Introduction

1. The General Assembly, by its resolution 66/204, entitled "Harmony with Nature", requested the Secretary-General to convene, during its sixty-sixth session, an interactive dialogue, to be held in a plenary meeting of the Assembly in commemoration of International Mother Earth Day in April 2012, with the participation of Member States, United Nations organizations, independent experts and other stakeholders, in order to make an effective contribution to the preparatory process of the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, from 20 to 22 June 2012.

2. The interactive dialogue of the General Assembly examined how human activity has impacted the Earth system by focusing, in particular, on areas where such impacts have already affected the regenerative capacity of the planet. The dialogue enabled an exchange of ideas and experiences from multiple perspectives, with particular emphasis on the contributions of science and economics. The present report is based on the issues addressed at the dialogue.

3. A concrete result of the contribution of the Harmony with Nature process in advancing sustainable development is its recognition in the outcome document of the United Nations Conference on Sustainable Development, "The future we want" (resolution 66/288), which was adopted by the General Assembly on 27 July 2012. Living in harmony with nature implies an equitable and balanced relationship with the Earth, humanity's source and sustenance. At the core of that relationship lies both a profound respect for the Earth and an acknowledgement of the vital imperative that the planet continue to exist and thrive, as well as an acceptance of humanity's responsibility to restore the health and integrity of the Earth system. This renewed recognition of the relationship between humankind and the Earth reaffirms that human existence is inextricably part of nature, and sets a path towards action based on that belief. Accordingly, the outcome document noted that some countries recognize the rights of nature in the context of the promotion of sustainable development. It also recognized that Mother Earth is a name for our planet common throughout the world.

## Harmony with Nature website

4. In its resolution 66/204, the General Assembly also requested the Secretary-General to continue making use of the existing information portal on sustainable development, which is maintained by the secretariat of the United Nations Conference on Sustainable Development and the Division for Sustainable Development of the Department of Economic and Social Affairs, to gather information and contributions on ideas and activities to promote a holistic approach to sustainable development in harmony with nature being undertaken to advance the integration of scientific interdisciplinary work, including success stories on the use of traditional knowledge, and existing national legislation. The dedicated Harmony with Nature website was launched at the Conference and can be accessed at www.harmonywithnatureun.org.[1]

5. The Harmony with Nature website contains an overview of national laws, highlighting the presence of the environment in constitutions around the world.

[1] See also resolutions 65/164 and 66/204.

Each country page displays relevant passages of national legislation, including national constitutions, containing specific references to the environment and provides a quick snapshot of when the environment was first introduced in each country's constitution. In instances where the environment is not addressed in the constitution, the overview references the introduction of the most appropriate environmental statute(s).

6. Given the vast number and the length of the environmental statutes and constitutional provisions enacted by Member States over the years, the objective of the website is not to reproduce all pieces of such legislation, but to focus on the centrepieces of national environmental law. The site provides an overview of the evolution of environmental consciousness worldwide and information with regard to the legal steps that have been undertaken in the path towards sustainable development.

7. Pursuant to General Assembly resolution 66/204, the following sections draw upon key issues discussed at the interactive dialogue on Harmony with Nature, particularly in the areas of science and economics.

## II. Human interaction with the Earth

8. The entire history of our species has taken place in the geological period traditionally called the Holocene, a relatively brief interval in the history of the planet, stretching back 10,000 years. During that time, humankind has influenced every aspect of the Earth's environment on a massive scale. Almost all of the planet's ecosystems bear the marks of our presence.

9. There are many well-known aspects of humanity's influence on the environment, and among the most prominent is climate change. The deforestation of vast tracts of land, in some cases nearly entire continents, means that great quantities of soil are being eroded and swept away; rich grasslands are turning to deserts; ancient ice formations are melting away; and species are being pushed towards extinction. Nutrients from fertilizers wash off fields and down rivers, creating stretches of sea where nothing grows except vast algal blooms. Atmospheric carbon dioxide may be at its highest level in 15 million years.

10. A growing number of scientists have advanced the concept that we have entered a new geological epoch that needs a new name, the Anthropocene. The Anthropocene is a term that has been widely used, particularly since the publication of an article by Paul Crutzen and Eugene Stoermer in 2000[2] to denote the present epoch, in which many geologically significant conditions and processes are being profoundly altered by human activity, including:

(a) The erosion and the shifting of sediments associated with a variety of anthropogenic processes, including colonization, agriculture, urbanization and global warming;

(b) The changing chemical composition of the atmosphere, oceans and soils, including significant man-made changes in the distribution of elements such as carbon, nitrogen, phosphorous and various metals;

[2] Crutzen, P. J., and E. F. Stoermer, "The Anthropocene", *Global Change Newsletter*, vol. 41 (2000).

(c) Environmental conditions generated by these perturbations, including global warming, ocean acidification and the spread of oceanic "dead zones";

(d) The change in the biosphere, both on land and in the sea, as a result of habitat loss, predation, species invasions and the physical and chemical changes noted above.[3]

11. These developments are all connected, and there is a risk of an irreversible cascade of changes that may lead us towards a future that is profoundly different from anything we have faced before. The following sections highlight key human activities that have led to the environmental conditions we now face.

## A. Evolution of the massive and escalating human impact on the Earth

12. The Earth is over 4.5 billion years old. The last geological epoch, the Quaternary, included two epochs, the Pleistocene and the Holocene. The latter, by far the shortest in the geological timescale, began about 10,000 years ago, and was characterized by changes in climate that that can be traced in the ice core of Greenland.

13. The Holocene is the last of a series of interglacial climate changes that have punctuated the severe icehouse climate of the past 2 million years. It is distinguished as an epoch for practical purposes. Many of the surface bodies of sediment on which we live, the soils, river deposits, deltas and coastal plains, were formed during that time.

14. Among the earliest species of the genus *Homo* was *homo habilis*, a species whose origin has been traced to East Africa some 1 to 2 million years ago. Since that time, over centuries of evolution, human beings through the range of their activities, have made significant changes to the planet and its ecosystems. Such changes have been brought about through the use of brute force, supplemented at first by primitive tools, and later on by tools and technology of ever-increasing sophistication.

15. From the beginning of the Holocene epoch, evidence of human activities became more widespread, most notably with the rise of agriculture in the fertile crescent of the Middle East and in other areas of the world. The shift from a hunting to a hunting and cultivation form of civilization has left a clear fossil record in the pollen preserved in sedimentary successions of that time. In addition, it has been postulated that the clearance of forests, associated with the rise of agriculture, may have contributed to the elevation of carbon dioxide levels in the atmosphere long before the Industrial Revolution.

16. Following the revolution in agriculture during the Neolithic period, human beings began to live in settlements of increasing size, and by the third millennium B.C., during the Bronze Age, there were well-established and distinctive civilizations in Mesopotamia, the Nile Valley, the Indus Basin and along the Yellow River. In the following millennia, urbanized cultures spread throughout the tropical and temperate zones worldwide, with those established in Europe, Central and South

[3] International Commission on Stratigraphy, Subcommission on Quaternary Stratigraphy, Working Group on the Anthropocene (http://www.quaternary.stratigraphy.org.uk/workinggroups/anthropocene).

America and China being significantly advanced by the first millennium B.C. The rate of urbanization accelerated over time, with the first cities with populations of over 1 million possibly appearing in late medieval times. Today there are numerous cities with between 10 and 20 million inhabitants — and their number is rapidly continuing to grow.

17. Urbanization is a direct result of a global population explosion. Since 1800, when the world population was roughly 1 billion, it has risen to over 7 billion today, and it is projected to be 9 billion by 2050. Megacities are now the most visible expression of human existence on the planet, the characteristic feature of the Anthropocene epoch.

18. When the human population was small, its economic activity, even if locally damaging, had little effect on the integrity of the planet's life-support system. Plant and animal life was vast and resilient, and human use of such resources had relatively little effect on the overall functioning of the global ecosystem. But today, with over 7 billion people on the planet, and technology pushing global economies to vastly expanded dimensions, we are living in a period when the complex Earth system that supports life on the planet are being dismantled faster than they are being put together.

19. The human footprint may leave a more profound impact than the physical structures of the world's megacities. For example, the impact of atmospheric carbon dioxide on the oceans has already increased their acidity and stressed vast numbers of organisms that form the basis of many food chains, substantially changing marine ecosystems. This phenomenon has already led to a decline in global biodiversity, and it will leave evidence in the fossil record.

## B. The Anthropocene: a new epoch in geological time

20. In 2000, the Nobel Prize-winning atmospheric chemist Paul Crutzen advanced the concept of the Anthropocene, already widely discussed within the scientific community, as the proper term to denote the current time period, during which many key processes are dominated by human influence. That concept has become a vivid expression for the degree of environmental change on Earth caused by humans, and it is currently under discussion by the International Commission of Stratigraphy as a potential formal unit of the geological timescale.

21. It is difficult to put a precise date on a transition that occurred at different times and at different rates in different places. Two pre-industrial events have been cited as marking the beginning of the Anthropocene. The first was the wave of extinctions of the Pleistocene megafauna. The second was the advent of agriculture, the so-called Neolithic revolution, early in the Holocene epoch.

22. The Industrial Revolution, which had its origins in the United Kingdom in the 1700s, marked the decline of agriculture as the dominant human activity and set the species on a far different trajectory from the one established during the Holocene epoch. It is clear that in 1750 the Industrial Revolution had barely begun, but by 1850 it had almost completely transformed the United Kingdom and had spread to other countries in Europe and worldwide. The widespread abandonment of the farm and the village for city life has undoubtedly been one of the great transitions in human development.

23. By the latter part of the eighteenth century the global effects of human activities had become clearly noticeable: data retrieved from glacial ice cores show the beginning of a growth in the atmospheric concentrations of several greenhouse gases, in particular carbon dioxide ($CO_2$) and methane ($CH_4$). That date coincides, not surprisingly, with James Watt's invention of the steam engine in 1784.

24. Mankind's growing influence on the environment was recognized as long ago as 1873, when geologist Antonio Stoppani spoke of a "new telluric force, which in power and universality may be compared to the greater forces of earth", referring to the "anthropozoic era". In 1926, V. I. Vernadsky, one of the founders of geochemistry, acknowledged the increasing impact of human consciousness and thought. Teilhard de Chardin, a French philosopher, and Vernadsky used the term "noösphere", the "world of thought", to mark the growing role of human intelligence in shaping our future and our environment.

25. George Perkins Marsh's influential *Man and Nature* is perhaps the first major work to focus on anthropogenic global change, while Stoppani coined the term "anthropozoic" to denote the time period.

26. For millennia, humans saw Nature as a challenge to be overcome. In the twentieth century, however, new technologies, fossil fuels and a fast-growing population resulted in a great acceleration in the human use of the planet's soil, forests and fish, which are now being consumed at a rate faster than they can be replenished, while greenhouse gases are increasing to dangerous levels in the atmosphere.

27. At the dawn of the twenty-first century, the effect of humanity on the planet include the unintentional, although not necessarily unknown, impact of, inter alia, the energy, manufacturing and transport sectors, which have resulted in air and water pollution, soil degradation and noise and electromagnetic pollution. There are also numerous intentional impacts, such as urban development, landscaping, large-scale agriculture, deforestation, and the damming of rivers.[4]

28. Such human impacts are embedded in the atmosphere, lithosphere, hydrosphere, cryosphere and biosphere. The effects of human activity are so numerous and dominant as to constitute an "Anthroposphere" that governs or disrupts the interconnected cycles and functions of the Earth's ecosystems. Endeavours to counteract these impacts that are being contemplated, especially "climate engineering", urgently need to be assessed, and relevant governance structures need to be developed. Through their collective impacts, humans have shaped, and continue to shape, the face of the Earth and its atmosphere on global spatial scales and geological timescales.[4]

29. There is a long-held viewpoint concerning human-environmental relationships, namely the human exemptionalism paradigm, in which human beings are seen as being separated from the environment, and as the masters of the planet.[5]

30. The historical origins of the doctrine have already been addressed in detail in the two previous reports of the Secretary-General on Harmony with Nature

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[4] Mark Lawrence, "The Anthropocene — Humans in the Earth System", second interactive dialogue on Harmony with Nature, April 2012 (www.harmonywithnatureun.org).

[5] R. E. Catton and W. R. Dunlap, "Environmental Sociology: A New Paradigm", *The American Sociologist*, vol. 13 (1978).

(A/65/314 and A/66/302). Today, scientists are admitting that this 300-year-old scientific doctrine is too simplistic and are finding that physical substances work and exist in terms of highly complex, interdependent, and changeable contexts and relationships. Scientists have therefore embraced a holistic view of the Earth system, in which all the elements are interconnected and changes in any one single element affects the functioning of the others in countless and, more often than not, in unknown ways.

## III. Transformation to a life in harmony with nature

31. During the second scientific revolution of the twentieth and twenty-first centuries, many of the assumptions about the relationship between human and environmental systems in Newtonian physics, commonly referred to as classical mechanics, were challenged and effectively changed. Newtonian physics was not informed by the theories of quantum mechanics and relativity advanced by Albert Einstein, among others.

32. In the current scientific view, influenced by quantum mechanics, the cosmos is seen as a seamlessly interconnected and complex whole, in which everything is quite literally connected with everything else. Any sense we may have that the collections of particles we think of as our individual selves are isolated and alone is an illusion fostered by a lack of understanding of the nature of reality.[6]

33. In the current thinking in the field of biological science, the system of life on Earth is seen as being self-organizing on the molecular, cellular and embryological levels, and interactions between organisms regulate the levels of atmospheric gases and sustain conditions that perpetuate the existence of the whole. Feedback loops between proteins, lipids, nucleic acids, cells, tissues, organs and organisms modify the structures and functions of systems and ecosystems in response to changing conditions in the environment.[6]

34. New scientific theories also provide a new understanding of the human relationship with the environment. There is no basis in science for the assumption that our species is separate from and inherently superior to other life forms or that we have a privileged place and function in the cosmos. There is, however, a basis for believing that, as members of the human family and the commonwealth of life, we have a duty to use our foresight and empathy for their benefit.[6]

35. Institutions, academia, scientific, economics and civil society organizations are calling for a change in the way humankind relates to the Earth. First and foremost, they are calling for humanity to treat the Earth with respect. Such respect can only be achieved when humankind changes the way it perceives its relationship with nature. In addition, they are calling on human beings to see their role not as masters but as guardians of the Earth. Such a change is fundamental to the survival of our species at all levels, environmental, social and economic, and it is imperative that we bring about a shift in ourselves and our role in the world.

36. Scientists and scholars in fields such as environmental sociology, ecological economics and law believe that the remarkable scientific changes and developments of the last two centuries are virtually absent from the framework of contemporary

[6] Capital Institute, "Economics, Finance, Governance and Ethics for the Anthropocene", working paper of the Third Millennium Economy (3ME) project, June 2012.

economics. They hold the view that the current economic system rests comfortably on the human exemptionalism paradigm and operates on the assumption that the Earth belongs to humans and that the environment is a subset of the human economy.

37. However, since the early 1960s, both scientists and scholars in other fields have been reminding us that such assumptions are at odds with scientific reality. Humankind and its economic goals must be seen as a part of the Earth system, as part of an integrated whole, rather than as a separate entity, divided from the planet and its changing environment. Humanity needs to recognize that it is time to serve the planet rather than using the planet to serve our economic goals. When science is taken into account, it is clear that damaging the environment to serve the needs of the human economy only serves to damage ourselves. In response policymakers have slowly started to consider concerted action to address the situation.

38. Economists, including ecological economists, have challenged the basic tenets of neoclassical economics and its purpose. Should the fundamental aim of economic theory continue to support the growth of extreme wealth for the few, which destroys overall social and ecological well-being, or should the economy transform itself to preserve and enhance the integrity, resilience and beauty of life, providing rich and fulfilling lives for all and promoting healthy ecologically balanced communities?

39. For the most part, educational systems have yet to adopt the theories being advanced by scientists and others who recognize that we are living in a new epoch. Students are still taught that we are living in the Holocene epoch, which began approximately 10,000 years ago at the end of the last ice age. Teaching students about the increasing negative impact that human behaviour has had on the Earth raises awareness of the issue and highlights the enormous responsibility that we have to live in harmony with nature.

40. The forbidding scope and expansion of the human impact on the planet has been put in a different context by many modern-day economists. Harmony with nature, in terms of economic theory, entails providing a scientific and ethical foundation for such an approach. Without basic laws of modern physics and ecology, limits to growth may be easily overlooked. Without an ethical foundation, principles of economics may easily be misapplied. For example, the principle of diminishing marginal utility has established that there is greater human benefit to be gained from poverty alleviation than from the increased consumption of goods and services by the already-wealthy. Yet, without an ethical foundation that reflects this fact, diminishing marginal utility may only lead producers (and advertisers) to cater to new markets in otherwise satiated societies.[7]

41. Properly grounded, a more ecologically informed economic system would provide clear rules for sustainability. For example, renewable resource extraction cannot exceed regenetive capacity; pollution overflows cannot exceed absorption capacity; neither extraction nor pollution can threaten essential ecosystem functions; and essential non-renewable resources cannot be depleted faster than the development of their substitutes.[7]

42. It is too often overlooked that economic growth, as currently defined, means increasing production and consumption of goods and services in the aggregate. It

[7] Joshua Farley, "Economics in Harmony with Nature and Science", second interactive dialogue on Harmony with Nature, April 2012 (www.harmonywithnatureun.org).

entails increasing population and/or per capita consumption as reflected in an increasing gross domestic product (GDP). In this way of thinking, the development of solar panels or other green products may not produce economic growth unless those activities increase production and consumption in the aggregate. In the aggregate, economic growth as indicated by increasing GDP is created at the competitive exclusion of non-human species. We are consuming our natural resources, including non-renewable resources, at a faster rate than their replenishment. Such growth in consumption is taking place despite technological progress and economies of scale, which serve only to maintain (if not exceed) the economic targets rather than ensuring the well-being of all.[8]

43. In mainstream economic terms, growth is measured not only in terms of benefits but also serves to measure the production of wealth. For example, pollution as an environmental negative is reflected as an economic benefit as a result of money spent on clean-up and environmental remediation. Thus pollution is shown as a positive indicator in GDP.[9] For societies to live in harmony with nature, the use of an instrument other than GDP is essential since that measure is not designed as an indicator of environmental degradation resulting from human activity.[10] In this regard, the outcome document of the United Nations Conference on Sustainable Development, "The future we want", recognizes the need for broader measures of progress and well-being to complement GDP in order to better inform decision-making on policy. The United Nations will be working to launch a programme of work in this area, building on existing initiatives.[11]

44. Numerous scientists, economists and legal experts, as well as members of civil society, have decried the escalating destruction of the Earth's natural systems and called for a rights-based movement for nature in order to recognize our dependence on and interconnectedness with the natural world. They are also calling for society to listen to increasingly dire warnings regarding the environmental impacts of humanity's misguided behaviour patterns, which are grounded in the false assumption that the natural world is property to be manipulated for human benefit. In this regard, they have stressed the urgent need to change destructive economic policies that are wresting control of the natural world to build private wealth for the few at the expense of the many, insisting that the economy must be placed at the service of the greater well-being of human beings and the Earth itself.[12]

45. In such a system, the rule of law, science and economics would be grounded in concern for the Earth. As articulated by Thomas Berry in his publication *The Great*

[8] Brian Czech, "Steady State Economics for Harmonizing with Nature", second interactive dialogue on Harmony with Nature, April 2012 (www.harmonywithnatureun.org).

[9] Peter G. Brown and Geoffrey Garver, *Right Relationship: Building a Whole Earth Economy* (Berrett-Koehler), 2009.

[10] See A/65/314, resolutions 65/164 and 66/204.

[11] Resolution 66/288, para. 38.

[12] Vandana Shiva, statement on Harmony with Nature at the United Nations Conference on Sustainable Development; Peter G. Brown, *The Commonwealth of Life: Economics and Politics for a Flourishing Earth* (Black Rose Books), 2007; Cormac Cullinan, "Governing People for Earth: The Challenge of the Twenty-first Century, first interactive dialogue on Harmony with Nature, April 2011 (www.harmonywithnatureun.org); Riane Eisler, "The Real Wealth of Nations: Creating an Economics of Partnership", first interactive dialogue on Harmony with Nature, April 2011 (www.harmonywithnatureun.org); Linda Sheehan, Earth Law Center (http://earthlawcenter.org); Global Alliance for the Rights of Nature (www.therightsofnature.org).

*Work*, "there is a need for humans to develop reciprocal economic relationships with other life-forms, providing a sustaining pattern of mutual support, as is the case with natural life-systems generally". Berry was of the view that this type of effort would appropriately place the human being within the dynamics of the planet, and that it should be supported by a philosophy and a system of law that "provide[s] for the legal rights of the geological and biological as well as human components of the Earth community".

46. A key challenge in developing a global governance system built on the rule of ecological law is reinvigorating a transformed sense of democracy, in which individuals and communities embrace their ecological citizenship in the world and act on their responsibility to respect the complex workings of the Earth system. Such a democracy would reconnect people to the ecological foundations that sustain them, and would recognize and enable maintenance of those connections in good working order over the long term.

47. Up until now, accepted thinking about how the economy works only in conventional terms, for example, increasing monetary wealth, supply and demand, market dynamics and financial incentives, has side-stepped a basic scientific understanding of how the Earth system on which the world economy depends operate.

48. We must transform ourselves to sustain what can be called the "world organism", a term coined by Alexander von Humboldt 200 years ago to explain that humans are deeply interlinked with the richness of nature and calling on humankind to enhance its role as a part of the world organism, not at its cost.

49. It is important to highlight the extent to which the neoclassical economic paradigm negatively affects sustainable development and efforts to attain harmony with nature. An exclusive emphasis on profit-making can significantly compromise sustainable development through unsustainable consumption and production, an emphasis that is increasingly being supported through the use of techniques that probe the subconscious. One example of such an approach is the commercial application of the science of consumer psychology, a specialization that studies how our thoughts, beliefs, feelings and perceptions influence how we buy and relate to goods and services.

50. One formal definition of the field describes the science of consumer psychology as "the study of individuals, groups, or organizations and the processes they use to select, secure, use and dispose of products, services, experiences or ideas to satisfy needs and the impacts that these processes have on the consumer and society".[13] The study of consumer behaviour blends elements from psychology, sociology, social anthropology and economics. It studies characteristics of individual consumers such as demographics and behavioural variables in an attempt to understand people's wants. It also tries to assess the influence of family, friends, reference groups and society in general on the consumer.

51. To further assist producers in their understanding of how consumers react to products, the advancement of Neuromarketing, the study of the brain's responses to ads, brands, and the rest of the messages littering society, is increasingly gaining ground. Neuromarketing is being assisted by medical technology, including magnetic resonance imaging technology, which is used to generate images of

[13] See http://psychology.about.com/od/branchesofpsychology1/a/consumer-psychology.htm.

internal body structures and to detect electrical frequencies emitted by the brain. It is now being used to study how the brain responds to different visual stimuli in the design of consumer products.[14]

52. The raison d'être of such marketing techniques is derived from the fact that the brain expends only 2 per cent of its energy on conscious activity, with the rest devoted largely to unconscious processing. Neuromarketers believe that traditional market-research methods, such as consumer surveys and focus groups, are inherently inaccurate because the participants can never articulate the unconscious impressions that create the desire for certain products.

53. The technological issue that characterizes the new epoch may not be so much the generation of know-how, but rather the prudent identification of "know-what", namely the assessment of the technological choices available, and "know-why", a participatory analysis of the socioeconomic and environmental needs that technology must address. Social policy should be reintegrated with socioeconomic and environmental issues in order that we may decide on which issues require technological input, and which basic principles should guide our decisions. Can humanity as a whole truly afford large expenditures on research and development for the improvement of consumer goods? Or should our technological forces be directed towards restoring harmony with the atmosphere, hydrosphere and biosphere? Such questions fall under the rubric of technology and risk assessment, an area deeply intertwined with ecological economics.[15]

54. Despite the many constraints imposed by the current economic system, which prevent us from fully mobilizing for sustainable development, there are many people worldwide from different walks of life striving to teach and build awareness that we must change away from our current, heavily promoted and advertised hyper-consumption society, which is at the heart of our current global economic system. To accommodate our current lifestyle for all of the 9 billion people estimated to be alive by 2050, we would need several more planets. We must therefore redefine and transform our lives in meaningful ways in order to stop the deleterious impact we are having on the Earth and on ourselves, and work to achieve overall well-being for humanity and for the planet. To recall Mahatma Gandhi, "the Earth provides enough to satisfy every man's needs, but not every man's greed".

55. Therefore, to achieve harmony with nature, we require new thinking and a major cultural shift. Much of the suffering, hunger, poverty and violence challenging the world today is a symptom of the prevailing "domination paradigm". When combined with our highly developed technology, that paradigm is leading us beyond the capacity of the Earth system, and it is simply not sustainable.[16]

56. Scientists and scholars from different social branches have already predicted that unless there is a global catastrophe, human beings will remain a major environmental force in the foreseeable future. A daunting task lies ahead: societies worldwide must move beyond the current destructive way of living and challenge destructive government processes. This will require changes in human behaviour at

[14] http://www.pbs.org/wgbh/pages/frontline/shows/persuaders/etc/neuro.html.

[15] Pat Mooney, "Who Will Control the Green Economy", second interactive dialogue on Harmony with Nature, April 2012 (www.harmonywithnatureun.org).

[16] Riane Eisler, "The Real Wealth of Nations: Creating an Economics of Partnerships", first interactive dialogue on Harmony with Nature, April 2011 (www.harmonywithnatureun.org).

all levels, including changes in structures intentionally built to prevent humankind from moving towards a path of sustainable development. Transforming humankind means building a culture that works with the Earth instead of against it so that we can truly live in Harmony with Nature.

## IV. Ethical basis for a relationship between humanity and the Earth

57. Our present situation can be summarized in the simple statement of the writer Thomas Berry: "in the twentieth century, the glory of the human has become the desolation of the Earth. And now, the desolation of the Earth is becoming the destiny of the human. Henceforth, the measure of all human institutions, professions, programmes and activities will be the extent to which they inhibit, ignore or foster a mutually enhancing human-Earth relationship".[17]

58. Scholars tell us that time has come to change from a neoclassical economic system, which is constantly being reaffirmed on unscientific assumptions about the dynamics of market systems deriving from neoclassical economic theory, to an economic system rooted in the science of the deeply interconnected mosaic of relationships between human and environmental systems.

59. This new economic approach must be taught and predicated on a different conception of value, one that implicitly recognizes that the ultimate value is preserving and protecting the health of the ecosystems that enable life to flourish on Earth.

60. Recent scientific advances highlight the need to carefully consider the long-term, aggregate impact of human activities on the Earth system that make up our environmental life support structure. Science also recognizes and teaches us that the Earth system is characterized by non-linear feedback and complex interactions between the living biosphere, including species and ecosystems, and physical processes.

61. It is understood that the climate system is not simply an atmospheric phenomenon as it involves exchanges of gases and energy between the atmosphere, the oceans, land masses and the lithosphere. Land and aquatic ecosystems not only provide many of the essential conditions and resources for sustainable life on the planet, such as fresh water and fertile soil, but are also tightly linked to processes and climate change on a global scale.

62. The protection of planetary life support systems is clearly a new category of scientifically defined goods and services that demand a new kind of governance response. It is of vital importance that such governance be based on non-market criteria.

63. Scientists and scholars from several fields, physics, economics, law, sociology, finance and governance, have acknowledged that, broadly speaking, our educational system still rests on outmoded assumptions that the Earth is a resource for our existing economic system. Similarly, many of our ethical beliefs and ethical principles misguidedly assume that humans are masters of, as opposed to being an integral part of, the life of the planet. This does not mean that all our existing moral beliefs must be discarded or overturned, but it does invite testing, adjusting and

[17] Thomas Berry, *The Dream of the Earth* (Sierra Club), 1988.

re-envisioning them in the same way that scientific assumptions have been tested, adjusted and re-envisioned over the centuries.

64. In 1500, scientists in Europe knew one thing for certain: the sun and the planets travelled around the Earth. People were educated to believe this, and all astronomy texts said so. In those times, the Earth was considered to be, both scientifically and metaphorically, at the centre of the Universe. In 1512, Copernicus determined that the Earth, long considered the immobile centre of the universe, moved around the sun.

65. Various scientific advances over the centuries have created a significant change in thinking, away from a reductionist and towards a holistic approach in the observation, perception and study of the Earth system and the role of human beings in the Universe. Scientists have been able to discern, retain and build upon the discoveries of the past that have assisted humankind in its understanding of the Universe and the role of humanity in it, and to establish that humanity is not part of a separate system made up of disparate parts, but part of an interconnected whole.

66. With regard to the current economic system, scientific findings inform us that humankind and the Earth system do not revolve around the axis of profit alone. The present economic system has not succeeded in overcoming the poverty afflicting over a billion people worldwide, nor has it ensured an equitable distribution of goods and services, nor has it been a good caretaker of the Earth system. The findings of science need to be applied to transform the economic paradigm to address pressing social and environmental challenges.

## V. Conclusion

67. The time has come for new thinking to develop an economic system centred on the Earth and that includes the scientific advances of the last hundred years. A new economic system is needed that discerns, retains and builds upon areas and practices that allow people to create a sustainable society.

68. Such a new economic system needs to have at its core a profound respect for the Earth upon which humanity depends. The Earth has provided much to humankind and it is time for humankind to reciprocate.

69. In the words of Vaclav Havel, "Only humankind's understanding of its place in the universe will allow the development of new models of behaviour, scales of values and objectives in life and, through these means, to finally bind a new spirit and meaning to specific regulations, treaties and institutions".

70. The voices of many scientists, scholars, environmental lawyers, political activists, artists and citizens can echo, illustrate and enlarge upon the reflections contained in the present report. They are urging a vision of nature as the complex of living and non-living substance that constitutes the biosphere — the habitat of all life. They are calling upon us to stop considering nature as a collection of resources to feed the world's economy and to start considering nature as part of an integrated ecological system deriving from and existing in an infinite universe.[18]

[18] Barbara Baudot, statement by the Triglav Circle on Harmony with Nature, November 2011 (www.triglavcircleonline.org).

71. Although scientists have great insight about the physical reality of the world around us, they are nevertheless unable to predict more than a fraction of nature's behaviour. The humility that results from the recognition that our understanding of the world is only a small fraction of the actual scope of life and the universe gives renewed validity to earlier views on the importance of that "glimmer of reality" as it pertains to our well-being and our future on the planet. But even glimpses of reality, the awe they inspire and the respect they generate are better than ignorance, and they should give us reason for living in conformity with the nature that envelops all living creatures.[18]

73. To quote Chief Seattle (1780-1866), an indigenous leader and spokesman for ecological responsibility, "We often forget that we did not weave the web of life; we are merely a strand in it. Whatever we do to the web, we do it to ourselves". Our planet has a history, and a complex one, it took hundreds of millions of years for nature and humankind to form the habitable surroundings that we enjoy today. The accelerating expansion of technological power, combined with the explosive growth of the world population, together with unsustainable consumption and production patterns, present unparalleled challenges to our environment.[19]

73. We are at a perilous point where our knowledge, our powers and our numbers have caused extensive damage to the environment. The preservation of the habitability of our world hangs in the balance, and never in our lifetimes has more been required of diplomacy.[19] Humanity needs to address its place in the Universe and to set a new course for its future.

## VI. Recommendations

74. **The significant impact of human activities on the Earth system has been widely acknowledged by the United Nations, the international and scientific community, major groups and other stakeholders worldwide. Drawing on the foregoing discussion, the interactive dialogues of the General Assembly on Harmony with Nature, the outcome of the United Nations Conference on Sustainable Development entitled, "The future we want", as well as the above analysis, Member States may wish to take into account the following recommendations:**

(a) **Draw on the Harmony with Nature approach outlined herein in their consideration of sustainable development policy issues at all levels;**

(b) **Ensure that policymaking in sustainable development is informed by the current scientific findings on the impacts of humanity on the Earth system;**

(c) **Showcase further, through the Harmony with Nature website, the work being undertaken in keeping with paragraph 40 of "The future we want" (resolution 66/288), in order to develop holistic and integrated approaches to sustainable development that will guide humanity to live in Harmony with Nature and lead to efforts to restore the health and integrity of the Earth system.**

[19] Owen Gingerich, "The Harmony of Nature", second interactive dialogue on Harmony with Nature, April 2012 (www.harmonywithnatureun.org).

United Nations A/67/318

General Assembly

Distr.: General
17 August 2012

Original: English

**Sixty-seventh session**
Item 20 (i) of the provisional agenda*
**Sustainable development: promotion of new and renewable sources of energy**

# Promotion of new and renewable sources of energy

## Report of the Secretary-General

*Summary*

New and renewable sources of energy are at the centre of global efforts to induce a paradigm shift towards green economies, poverty eradication and, ultimately, sustainable development. Record investments continue being made by some countries to propel the innovation, development and commercialization of renewable energy technologies. Nevertheless, the international economic crisis and changing policy environments in some countries are creating new uncertainties and challenges when enhanced cooperation and action are needed to increase substantially the contribution of these technologies to the global energy system. In 2011 and 2012, however, there has been promising renewed interest in renewable energy, resulting from the initiative of the Secretary-General "Sustainable Energy for All". The remarkable national, regional and global commitments announced during the past two years, including at the United Nations Conference on Sustainable Development held in June 2012, demonstrate the effectiveness of this initiative in the promotion of new and renewable sources of energy.

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# I. Introduction

1. The General Assembly, in its resolution 62/197, reaffirmed the need for putting into action the full Plan of Implementation of the World Summit on Sustainable Development ("Johannesburg Plan of Implementation")[1] as the intergovernmental framework for energy for sustainable development. The Johannesburg Plan of Implementation calls for action at all levels to, with a sense of urgency, substantially increase the global share of renewable energy sources with the objective of increasing its contribution to total energy supply.[2] The Assembly encouraged the United Nations system to continue to raise awareness of the importance of energy for sustainable development, including the need for the promotion of new and renewable sources of energy and the increased role they can play in the global energy supply, particularly in the context of sustainable development and poverty eradication.

2. By the same resolution, the Assembly welcomed initiatives that aim to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services for sustainable development in order to contribute to the achievement of internationally agreed development goals, including the Millennium Development Goals. In addition, the Assembly recognized the contributions of new and renewable sources of energy to reducing greenhouse gases and addressing climate change, and called upon the international community to support the least developed countries, the landlocked developing countries and the small island developing States in their efforts to develop and utilize energy resources, including new and renewable energy.

3. By resolution 65/151, the Assembly decided to declare 2012 the International Year of Sustainable Energy for All. In pursuance of that decision, initiatives are being undertaken by Member States and international organizations to create at all levels an enabling environment for the promotion of access to energy and energy services and the use of new and renewable energy technologies.

4. The present report is submitted in response to General Assembly resolution 66/206, in which the Assembly requested the Secretary-General to submit to it at its sixty-seventh session a report on the promotion of new and renewable sources of energy. In the same resolution, the Assembly invited Member States, as well as the United Nations system and all other relevant stakeholders, to use the opportunity offered by the International Year to raise global awareness of the importance of new and renewable sources of energy and low-emission technologies, the more efficient use of energy, greater reliance on advanced energy technologies, including cleaner fossil fuel technologies, and the environment-friendly use of traditional energy resources, as well as the promotion of access to modern, reliable, affordable and sustainable energy services, and noted in that regard the initiative of the Secretary-General "Sustainable Energy for All".

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[1] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

[2] Ibid., paragraph 20 (e).

# II. Overview of new and renewable sources of energy

## A. Status

5. The role of renewable energy in global energy supply continues to increase in some regions of the world. The trends of the past decade reflect strong growth in all energy sectors, including power generation, heating and cooling, and transport fuels. Nevertheless, the overall contribution of new and renewable sources of energy to the global energy system remains limited, and the outlook is clouded by the uncertainties resulting from the international financial crisis and declining political support in some countries.

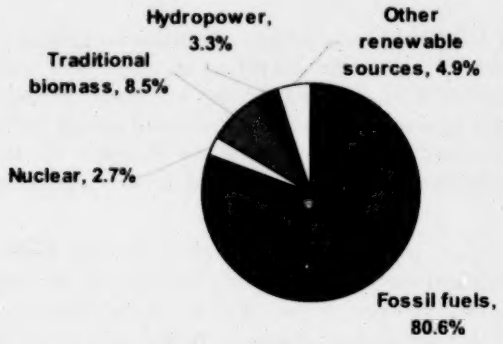
6. Recent events, such as the impact of the natural disasters at the Fukushima nuclear plant in Japan in 2011, highlight the importance of continuing to develop cost-competitive new and renewable sources of energy. In many countries, policymakers and the public and private sectors continue to be supportive of national strategies to accelerate the deployment of renewable energy technologies and to expand their corresponding markets. At the global level, the initiative of the Secretary-General "Sustainable Energy for All" and the declaration by the General Assembly of 2012 as the International Year of Sustainable Energy for All have sparked the announcement of significant commitments on actions that provide strong support for the increased use of new and renewable energy sources. These efforts are key to sustaining the transformation of energy systems and to fuelling the green economies of the future.

7. Figure I shows the shares of various fuels in global final energy consumption in 2011. The total share of renewable energy sources in energy consumption is 16.7 per cent. Of all renewable energy sources, traditional biomass still has the largest share, at 8.5 per cent, followed by hydropower at 3.3 per cent. Other renewable energy sources, with a total share of 4.9 per cent, include wind, solar, geothermal, modern biomass and biofuels.

8. Traditional biomass is solid biomass used in an unsustainable manner and includes fuelwood, agricultural waste and animal dung. It usually represents the only fuel available or affordable to the poor in many developing regions. Worldwide, about 2.7 billion people continue to depend on traditional biomass for cooking, 84 per cent of whom live in rural areas.[3] The use of traditional biomass and lack of ventilation in households in developing countries are associated with very high levels of pollutants, such as particulates, carbon monoxide and formaldehyde. Women and young children represent the segments of the population with the highest exposure to these pollutants.

[3] Organization for Economic Cooperation and Development (OECD)/International Energy Agency (IEA), *World Energy Outlook 2011* (Paris, 2011).

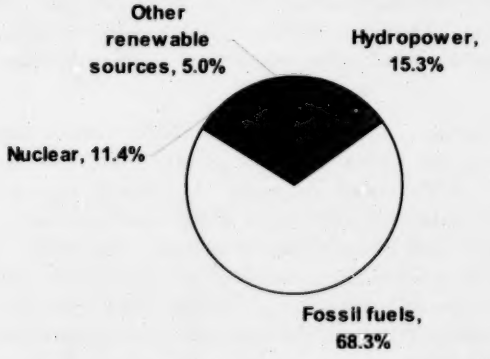
Figure I
**Fuel shares in global final energy consumption, 2011**




*Source*: Renewable Energy Policy Network for the 21st Century (REN21), *Renewables 2012: Global Status Report* (Paris, REN21 Secretariat, 2012).

9. Figure II shows fuel shares in global electricity generation for 2011. Renewable energy sources generated about 20 per cent of the electricity worldwide in 2011, with hydropower providing about 15 per cent. Other renewable sources generated 5 per cent of global electricity in 2011.

Figure II
**Fuel shares in global electricity generation, 2011**

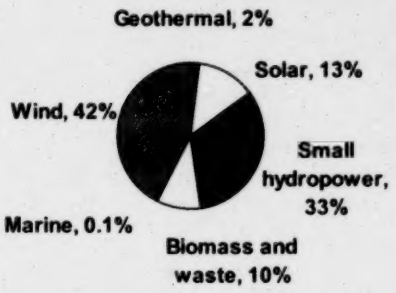



*Source*: *Renewables 2012: Global Status Report* (see fig. I). Data on nuclear share are from World Nuclear Association, "Nuclear share figures, 2001-2011" (London, April 2012).

10. In terms of power capacity, renewable sources comprise more than 25 per cent of the total global power-generating capacity, estimated at 5,360 gigawatts (GW) in 2011. Figure III shows shares of global renewable electric power capacity. The shares of renewable fuel sources consider only small hydropower plants (between

1 and 50 megawatts).[4] Wind has the largest capacity share at 42 per cent, followed by small hydropower at 33 per cent and solar at 13 per cent.

Figure III
**Shares of global renewable electric power capacity, 2011**




*Source*: The Pew Charitable Trusts, *Who's Winning the Clean Energy Race? 2011 Edition* (Philadelphia, Pennsylvania, 12 April 2012).
*Note*: Data exclude large hydropower and consider only small hydropower (between 1 and 50 megawatts).

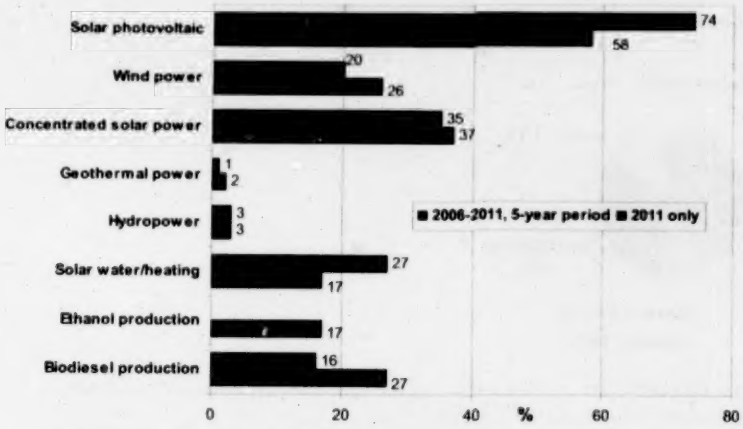
11. The average annual growth rate of renewable energy capacity and biofuel production for the period 2006-2011 and for 2011 only is illustrated in figure IV. Most new and renewable sources of energy grew at an accelerated pace during 2006-2011. In 2011, solar capacity experienced the fastest growth, with 74 per cent for solar photovoltaic, 35 per cent for concentrated solar power and 27 per cent for solar hot water/heating.

12. Solar photovoltaic was the fastest growing renewable energy technology worldwide from 2000 to 2011, with an average annual growth of over 40 per cent. The growth was mainly in a few developed markets such as Germany, Italy, the United States of America and Japan.[5] Regions with good solar potential, such as Africa and parts of Asia, could add significant solar capacity.

[4] Some references consider small hydropower plants to be those with a capacity of less than 10 megawatts.

[5] OECD/IEA, *Tracking Clean Energy Progress: Energy Technology Perspectives 2012 Excerpt as IEA input to the Clean Energy Ministerial* (Paris, 2012). Available from www.iea.org/papers/2012/Tracking_Clean_Energy_Progress.pdf.

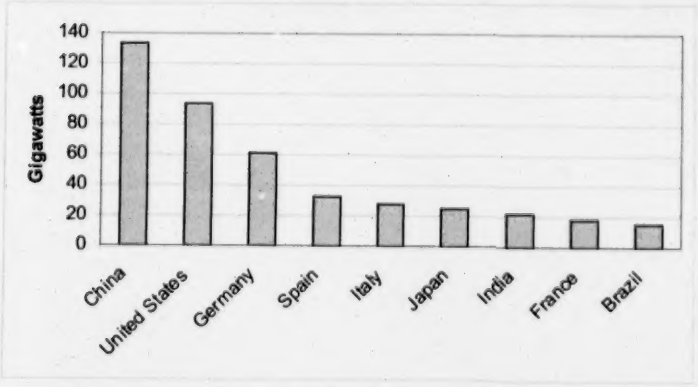
Figure IV
**Average annual growth rate of renewable energy capacity and biofuel production, 2006-2011 and 2011**




*Source*: *Renewables 2012: Global Status Report* (see fig. I).

13. China is leading the world in installed new renewable energy capacity, followed by the United States of America (see fig. V).[6] Other developing countries which have relatively large capacities include Brazil and India. In addition, China also has been leading in terms of growth in the past five years, followed by Turkey, Brazil, Italy and Argentina. The industry is being supported in these countries by accelerated private investment, consistent and stable government energy policies and advances in technology that are being translated into cost reductions.

Figure V
**Countries with largest installed new renewable energy capacity by 2011**




*Source*: *Who's Winning the Clean Energy Race? 2011 Edition* (see fig. III).
*Note*: Data for hydropower are for plants with capacities between 1 and 50 megawatts.

[6] The Pew Charitable Trusts, *Who's winning the Clean Energy Race? 2011 Edition* (Philadelphia, Pennsylvania, 2012).

14. Cost estimate comparisons of energy technologies vary considerably and depend on many factors and assumptions that affect the calculations. In 2011, REN21 published costs for renewable energy technologies from a variety of sources, including IEA, the National Renewable Energy Laboratory in the United States of America and the World Bank (see table 1). These costs are economic costs, exclusive of subsidies or policy incentives.

15. The costs of some renewable energy technologies are now competitive with the costs of conventional energy technologies which are generally estimated to be between 4 and 10 cents per kilowatt hour.[7] Onshore wind, biomass and geothermal for power generation are becoming competitive in some world regions. Biomass, some solar and geothermal are also competitive for hot water and heating, as is ethanol for transportation. Most alternatives for off-grid applications in rural areas are still too expensive. The high costs of these technologies, in addition to other important development and transfer barriers, indicate the need for more support for the promotion of renewable energy in developing countries.

Table 1
**Costs of renewable energy technologies**

| *Technology* | *Typical characteristic* | *Typical energy cost (United States cents)* | *Comment* |
|---|---|---|---|
| **Power generation (cost per kWh)** | | | |
| Large hydropower | 10-18,000 (MW) | 3-5 | Currently one of the lowest-cost energy technologies |
| Small hydropower | 1-10 MW | 5-12 | |
| Onshore wind | 1.5-3.5 MW | 5-9 | Blade diameter: 60-100 metres |
| Offshore wind | 1.5-5 MW | 10-20 | Blade diameter: 70-125 metres |
| Biomass | 1-20 MW | 5-12 | |
| Geothermal | 1-100 MW | 4-7 | Types: binary, single- and double-flash, natural steam |
| Rooftop solar photovoltaic | 2-5 kW-peak capacity | 17-34 | |
| | 200 kW to 100 MW | 15-30 | |
| Concentrated solar power | 50-500 MW (trough)<br>10-20 MW (tower) | 14-18 | Costs for trough plants; costs decrease as plant size increases; a rapidly maturing technology |
| **Hot water/heating (cost per kWh)** | | | |
| Biomass heat | 1-20 MW | 1-6 | Most cost-competitive renewable energy technology for heating |

[7] REN21, *Renewable Energy Potentials in Large Economies — Summary Report: Opportunities for the Rapid Deployment of Renewable Energy in Large Economies, its Impacts on Sustainable Development and Appropriate Policies to Achieve It* (Paris, 2008); and Intergovernmental Panel on Climate Change, 2011, *Special Report on Renewable Energy Sources and Climate Change Mitigation* (available from http://srren.ipcc-wg3.de/report).

| *Technology* | *Typical characteristic* | *Typical energy cost (United States cents)* | *Comment* |
|---|---|---|---|
| Solar | 2-5m$^2$ (household) | 2-20 | Household, medium and large |
| | 20-200m$^2$ (medium/ multi-family) | 1-15 | Types: evacuated tube, flat-plate |
| | 0.5-2 MWth (large/district heating) | 1-8 | |
| Geothermal | 1-10 MW | 0.5-2 | Applied for heating and cooling; types: heat pumps, direct use, chillers |
| **Biofuels (cost per litre)** | | | |
| Ethanol | Sugar cane, sugar beets, corn, cassava, wheat | 30-50 (sugar) | Gasoline equivalent |
| | Sorghum (and cellulose in future) | 60-80 (corn) | Gasoline equivalent |
| Biodiesel | Soy, rapeseed, mustard seed, jatropha, palm, waste vegetable oils | 40-80 | Diesel equivalent |
| **Rural (off-grid) energy (cost per kW)** | | | |
| Mini hydropower | 100-1,000 kW | 5-12 | |
| Micro hydropower | 1-100 kW | 7-30 | |
| Pico hydropower | 0.1-1 kW | 20-40 | |
| Biogas gasifier | 20-5,000 kW | 8-12 | |
| Household wind turbine | 0.1-3 kW | 15-35 | |
| Village-scale mini grid | 10-1,000 kW | 25-100 | |
| Solar home system | 20-100 watts | 40-60 | |

*Source*: REN21, *Renewables 2011: Global Status Report* (Paris, REN21 Secretariat, 2011).
*Abbreviations*: kW, kilowatt; kWh, kilowatt hour; MW, megawatt; MWth, megawatt thermal.

16. Nevertheless, technological improvements and innovation are allowing a rapid downward trend in the costs of most renewable energy technologies. Significant cost reductions have been achieved in the past decades, particularly for onshore wind (27 per cent) and solar photovoltaic (42 per cent).[8] The prices of solar photovoltaic modules per megawatt have fallen 60 per cent since 2008.[9] In some countries, solar has been reported to be competitive with other options in electricity retail prices. Wind turbine prices are also down 18 per cent since 2008. The expectation is that this trend will continue.

[8] OECD/IEA, *Tracking Clean Energy Progress: Energy Technology Perspectives 2012 Excerpt as IEA input to the Clean Energy Ministerial.*

[9] United Nations Environment Programme (UNEP) and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2011* (June, 2011). Available from www.unep.org/pdf/BNEF_global_trends_in_renewable_energy_investment_2011_report.pdf.

17. Technological innovations are anticipated in regard to concentrated solar power and photovoltaic technologies and related manufacturing processes, enhanced geothermal systems, multiple emerging ocean technologies, advanced biofuels and biorefining, and foundation and turbine designs for offshore wind energy.[10]

18. The use of renewable energy provides many benefits that support the achievement of the universal and national goals for sustainable development. The carefully designed and integrated use of renewable energy technologies can, for example, create jobs, increase energy security, improve human health, enhance environmental protection and mitigate climate change.[11] Renewable energy technologies can also be used in climate change adaptation processes.

19. Globally, it is estimated that there are about 5 million direct or indirect jobs in renewable energy industries.[12] In 2009 and 2010, about 1 million jobs were created by the industry.[13] Figure VI shows the estimated jobs in renewable energy worldwide by industry in 2011. The industry with the largest number of jobs is biofuels, with about 1.5 million, followed by solar heating/cooling and solar photovoltaic. Although the total number of renewable energy jobs continued to increase through 2011, some countries are experiencing a decrease in the rate of growth or actual job losses as in the case of Spain.

20. Another important area of extreme importance for sustainable development is water. Renewable energy technologies using dry-cooling are not as vulnerable as conventional water-cooled thermal power plants (including nuclear plants) to conditions of water scarcity and climate change. The management of water resources represents a very important issue in sustainable development.

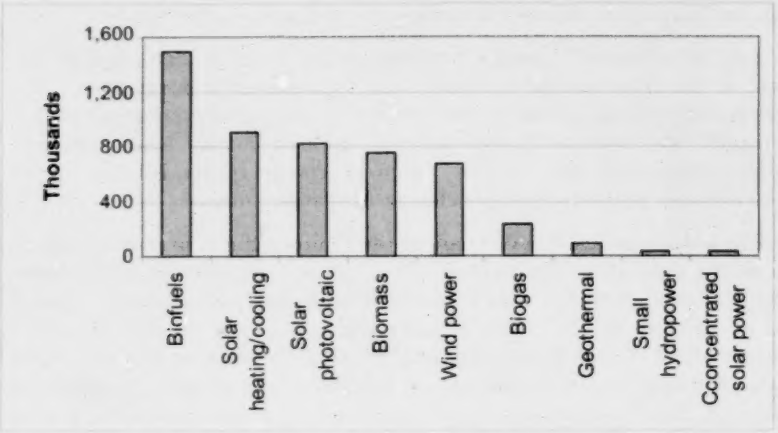
[10] Intergovernmental Panel on Climate Change, 2011, *Special Report on Renewable Energy Sources and Climate Change Mitigation*.

[11] International Institute for Applied Systems Analysis (IIASA), *Global Energy Assessment: Toward a Sustainable Future* (Cambridge, Cambridge University Press, 2012). Available in October 2012.

[12] REN21. *Renewables 2012: Global Status Report* (Paris, REN21 Secretariat, 2012). Available from www.map.ren21.net/GSR/GSR2012.pdf.

[13] Ibid.

Figure VI
**Estimated jobs in renewable energy worldwide by industry, 2011**




*Source*: *Renewables 2012: Global Status Report* (see fig. I).

21. There are still major, challenging economic and technological factors that affect the large-scale deployment of renewable energy, including: (a) reducing costs through learning and scale-up; (b) creating a flexible investment environment; (c) integrating renewable energy technologies into energy systems; (d) enhancing research and development; and (e) assuring the sustainability of the renewable energy technologies.[14]

22. Currently, renewable energy markets are experiencing significant changes due to the world economic crisis and the subsidy reductions in some key markets. The upheaval process is characterized by the restructuring and geographical shifting of supply chains. The current situation reflects a transition from support-driven markets to new and potentially more competitive markets.

23. In addition, recent drops in oil prices and increasing fossil fuel reserves in some regions, in particular of gas and oil resources, are starting to affect the competitiveness of renewable energy technologies. The perceived increase in the availability of fossil fuels is expected to affect the long-term scenarios that project a more active role and larger share of renewable energy in global energy supply.

## B. Investments

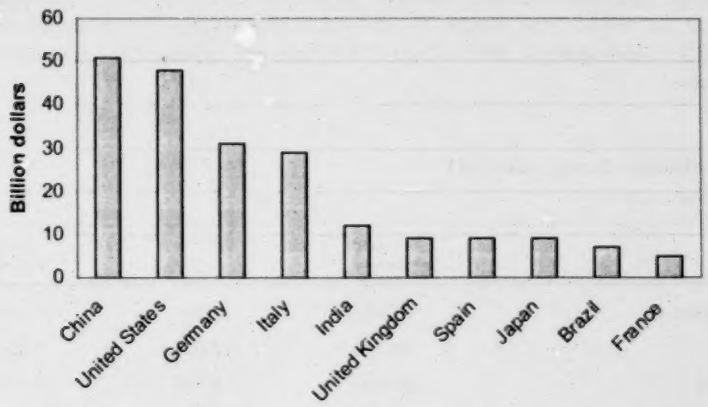
24. Global financing in the renewable energy sector in 2011 amounted to a record $257 billion.[15] This represents an increase of 17 per cent over 2010, with developing countries accounting for 35 per cent of total investment. Countries members of OECD and large emerging economies such as China, India and Brazil, are now the leaders, with record investments. Figure VII shows the top countries in new investment in clean energy in 2011. Figure VIII shows the global new

[14] IIASA, *Global Energy Assessment: Toward a Sustainable Future*.

[15] UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2011*.

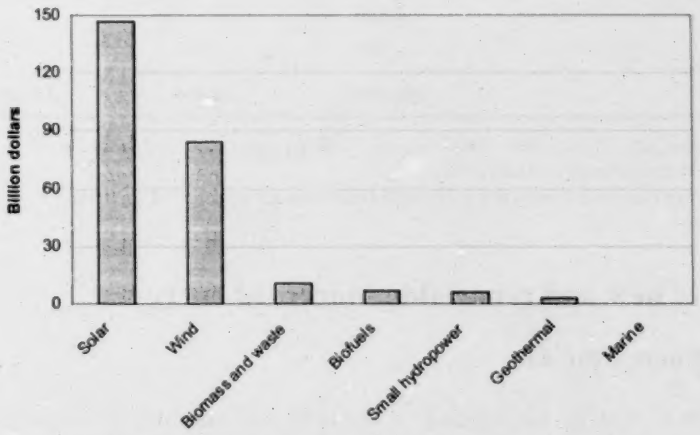
investment in renewable energy by sector in 2011. The largest investments were in solar power ($147 billion), followed by investments in wind ($84 billion).

Figure VII
**Top countries in clean energy investment, 2011**
(Billions of United States dollars)




*Source*: UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2011* (June, 2011).

Figure VIII
**Global new investment in renewable energy by sector, 2011**
(Billions of United States dollars)




*Source*: *Global Trends in Renewable Energy Investment 2011* (see fig. VII).

25. Countries are following different strategies in their investments. The United States has the highest investment in venture capital, which is directed to the early stage of the technology development cycle with the objective of capitalizing later.

Europe has concentrated on stimulus for demand using regulatory policies such as feed-in tariffs to meet targets which promote renewable electricity generation. Asia is trying to capture the supply chain of technologies such as photovoltaic modules and wind turbines.

26. During the global crisis of 2008 and 2009, members of the Group of Twenty established stimulus funds of over $194 billion, which had long-term strategic significance for green growth and the clean energy sector. Table 2 presents the status of these funds at the end of 2011. About 73 per cent of the stimulus funds have been spent, with $46.3 billion spent in 2011. Over $53 billion are expected to be spent in the next few years.

Table 2
**Clean energy stimulus funds, end-2011**
(Millions of United States dollars)

| *Country* | *Total announced* | *Spent in 2011* | *Total remaining* |
|---|---|---|---|
| United States of America | 65 600 | 15 700 | 23 600 |
| China | 46 200 | 12 000 | 2 200 |
| Republic of Korea | 32 400 | 6 300 | 15 800 |
| Germany | 15 100 | 6 200 | 2 |
| Other European Union | 11 100 | 2 600 | 5 300 |
| Japan | 10 500 | 1 400 | 100 |
| Australia | 3 900 | 8 | 2 200 |
| United Kingdom of Great Britain and Northern Ireland | 3 400 | 1 400 | 800 |
| Brazil | 2 400 | – | 2 300 |
| France | 2 100 | – | – |
| Canada | 600 | 500 | – |
| **Total** | **194 000** | **46 300** | **53 200** |

*Source*: The Pew Charitable Trusts, *Who's Winning the Clean Energy Race? 2011 Edition* (Philadelphia, Pennsylvania, 12 April 2012).
*Note*: Members of the European Union not profiled individually are aggregated as "Other European Union".

# III. Promotion of new and renewable sources of energy

## A. Sustainable Energy for All

27. In September 2011 at the opening of the General Assembly's sixty-sixth session, the Secretary-General launched the Sustainable Energy for All initiative, which seeks to identify and mobilize action by all stakeholders in support of energy access, energy efficiency and increasing the share of renewable energy. At the same time, the Assembly declared 2012 the International Year of Sustainable Energy for All, recognizing the importance and urgency of energy challenges.

28. On 1 November 2011, the Secretary-General presented his vision statement, "Sustainable Energy for All" (A/66/645), which presents the case for change and defines the goal of achieving sustainable energy for all by the year 2030. This initiative of the Secretary-General has three specific objectives which underpin the goal of achieving sustainable energy for all: (a) ensuring universal access to modern energy services; (b) doubling the rate of improvement in energy efficiency; and (c) doubling the share of renewable energy in the global energy mix. By July 2012, the set of actions taken for the implementation of the initiative had proved it to be one of the most effective mechanisms currently in place at a global scale for the promotion of new and renewable sources of energy.

29. The vision statement of the Secretary-General was followed by the creation of the High-level Group on Sustainable Energy for All. The implementation plan for the initiative included the development of a framework for action and a communication strategy and plan, and the creation of task forces assigned to assess the three major objectives of the initiative. The framework for action identified the value of participation for each major stakeholder group, the benefits of stakeholder collaboration, the structure of the commitment process and the guiding principles of the initiative. Several high-level meetings and conferences were convened during the last quarter of 2011 and the first half of 2012, which resulted in the expression of major support for this initiative all over the world.

30. In April 2012, the global action agenda was launched. The agenda provides a strategy for engagement by Governments, the private sector and civil society. The agenda offers the United Nations as a convening platform where key stakeholders from both developing and developed countries can mobilize bold commitments, foster new public-private partnerships, and leverage the significant investments needed to make the transformative changes needed in the world's energy systems. The global action agenda recommends 11 action areas to help focus efforts and mobilize commitments towards the three main objectives. Each of the action areas puts forward a number of high-impact opportunities around which Governments, business and civil society can rally.

31. In June 2012, the United Nations Conference on Sustainable Development provided an extraordinary opportunity for government leaders, civil society, communities and the private sector to define strong and decisive commitments to mobilize support to achieve the goal of sustainable energy for all by 2030. Over 100 concrete commitments and actions were announced to support the Secretary-General's initiative. Over 50 developing countries have engaged with the initiative, and the European Commission has set out an ambitious goal of helping to provide access to sustainable energy services to 500 million people by 2030. Key commitments were made by the private sector and civil society as well as Governments, donors, entrepreneurs, organizations, artists and individual volunteers. Businesses and investors have committed over $50 billion to achieve the objectives of the initiative. Tens of billions of dollars have been committed by other key stakeholders — Governments, multilateral development banks, and international and civil society organizations — to catalyse action in support of the initiative. More than 1 billion people will benefit from the public and private sector commitments. Most beneficiaries in developing countries will gain improved access to energy through grid extension and off-grid solutions, as well as scaled-up renewable energy sources, increased investment and improved energy policies.

32. Although the Sustainable Energy for All initiative has secured remarkable commitments, much more needs to be done to ensure their successful implementation in the next two decades. Nevertheless, by bringing all key stakeholders together to work on a common cause for the common good, the initiative provides a powerful model for the future. The initiative has also created global awareness of the importance of energy for sustainable development and has brought the issue to the top of the agenda for decision makers at the national and international levels. Furthermore, the efforts so far are providing a major boost to the promotion of new and renewable sources of energy.

## B. National efforts

33. Governments are using different policies for promoting research, development, demonstration, deployment and commercialization of new and renewable sources of energy. At present, at least 118 countries have renewable energy targets in place and 109 countries have policies supporting renewable energy in the power sector. Most of these efforts are coordinated at the national level. One example at the regional level is that of the European Union which aims to meet 20 per cent of its gross final energy consumption from renewable sources by 2020.

34. Many cities and local governments also have active policies, plans and targets for the promotion of renewable energy use. The policies are usually associated with climate change mitigation goals. Currently, there are many institutions encouraging cooperation among cities for the local deployment of renewable energy systems.

35. Policymakers are becoming aware of the need for closer integration of renewable energy policies with policies in other economic sectors. This results from the perceived wide range of benefits that can be derived from the use of renewable energy, including energy security, reduced import dependency, reduction of greenhouse gas emissions, job creation, rural development, energy access, improved health and prevention of loss of biodiversity.

36. Policies promoting renewable energy can be classified into (a) regulatory policies, (b) fiscal incentives, (c) public finance mechanisms and (d) climate-led policies. Regulatory policies include feed-in tariffs, quotas or portfolio standards, priority grid access, building mandates, and biofuel blending requirements. Fiscal incentives refer to tax policies and direct government payments, such as rebates and grants. Public finance includes such mechanisms as loans and guarantees. Climate-led efforts include carbon pricing mechanisms, cap and trade schemes, emission targets and others.[16]

37. Many countries are adopting a menu of policy incentives instead of a single policy approach. Policymakers realize that these incentives need to be coherent, stable and designed for the long-term in order to attract the necessary funds for the robust deployment and strong markets that ultimately will reduce the cost of renewable energy.

38. Many of these incentive policies are associated with national targets. Targets are being defined in terms of renewable shares in primary energy, final energy,

[16] Intergovernmental Panel on Climate Change, 2011, *Special Report on Renewable Energy Sources and Climate Change Mitigation*; and REN21, *Renewables 2012: Global Status Report*.

electricity generation and electric capacity. Most targets are defined for shares of electricity generation and typically aim at a target of between 10 and 30 per cent of renewable energy in total electricity generation within one or two decades. More specific targets are also being defined in terms of various technologies.

39. Some countries have been very successful in the promotion of renewable energy through the use of coherent and stable policies. Germany, with a strong policy of feed-in tariffs supporting investments in wind, solar and biomass, has been able to sustain an accelerated growth in the use of renewable energy. In 2011, there was a sharp increase in the deployment of small-scale solar projects to about 7.5 GW of new solar capacity.

40. China is leading the world in installed new renewable energy capacity with an annual five-year growth rate during 2006-2011 of 93 per cent. A combination of national clean energy policies, including feed-in tariffs for wind and subsidies for rooftop and building integrated photovoltaic solar, has been very successful. China is also leading in the manufacture of wind turbines and solar modules.

41. Brazil is using electricity generation subsidies and preferential loans to provide incentives for the use of wind, small hydropower and biomass. Its key renewable energy sectors include ethanol for transport, with a production of 36 billion litres annually, and biomass electric capacity of about 8.7 GW. Brazil has committed $4.3 billion to achieving full national energy access by 2014, and is planning to invest a total of $235 billion over 10 years in renewable energy, mainly in hydropower and biofuels but also in biomass and wind.

42. India is using different policy instruments to promote renewable energy, including feed-in tariffs for wind and solar, accelerated depreciation for small hydropower and biomass, and preferential tax rates for other renewable energy projects. Its new renewable power capacity now totals 22.4 GW and is based on biomass, small hydropower and solar.

43. In 2011 and 2012, policy support for renewable energy in some countries was stimulated by the Secretary-General's initiative "Sustainable Energy for All". At the United Nations Conference on Sustainable Development, many countries announced or confirmed their partnership in the initiative and have initiated or developed national energy action plans which include programmes to increase the use of renewable energy. In addition, 20 small island developing States announced switching to renewable energy and reducing dependency on fossil fuels.

44. Norway announced a new commitment of about $140 million over five years to support energy access in some African countries. The financial support will help scale up access to sustainable energy in rural areas of Ethiopia, to replace kerosene lamps with solar alternatives in Kenya, and to develop a strategic energy and climate plan for Liberia.

45. The United States Government plans to provide $2 billion in grants, loans and loan guarantees for policy and regulatory development, public-private energy technology partnerships, and loans and guarantees to leverage private investment in clean energy technology.

46. There are important national initiatives to provide efficient biomass cookstoves and other renewable technologies to households around the world. For example, India is currently planning the roll out of efficient renewable energy

solutions to the hundreds of millions of homes across India.[17] Other countries, such as China, Mexico, Ethiopia and Nepal, are also planning national initiatives to bring cleaner renewable energy to homes.[18]

## C. International institutional efforts

47. Organizations of the United Nations system continue to provide support for the promotion and expansion of new and renewable sources of energy in developing countries. Efforts during 2011 and 2012 have brought attention and awareness in particular to the important issue of universal energy access, energy efficiency and the promotion of new and renewable sources of energy, in line with the objectives of the Secretary-General's initiative "Sustainable Energy for All".

48. The States parties to the United Nations Framework Convention on Climate Change have been undertaking analyses of the gaps and barriers to finance climate change technologies. A number of mechanisms and initiatives to tackle climate change have emerged, which support energy technology cooperation and promote financing for new and renewable energy. At the sixteenth session of the Conference of the Parties in 2010, the States parties agreed to establish the Technology Mechanism, which consists of the Technology Executive Committee and the Climate Technology Centre and Network. The Centre is designed to support the transfer of relevant technologies, including renewable energy technologies. Elements in the agreement reached at the 2010 Conference included a total of $30 billion in fast-track finance from industrialized countries to support climate action in the developing world up to 2012 and the intention to raise $100 billion a year by 2020. In addition, the decision was made to establish the Green Climate Fund.

49. At its seventeenth session in 2011, the Conference of the Parties agreed on the details for operationalizing the Technology Mechanism. Agreement was also reached on the governing instrument of the Green Climate Fund. It is expected that both the Climate Technology Centre and Network and a possible new technology facilitation mechanism, proposed at the United Nations Conference on Sustainable Development in June 2012, will contribute to facilitating the deployment of new and renewable energy technologies.

50. The World Meteorological Organization (WMO) and the International Renewable Energy Agency (IRENA) are currently collaborating to assist the work of the Clean Energy Ministerial Working Group on a solar and wind energy atlas through the identification and facilitation of access to available data sets from WMO programmes and other initiatives involving WMO. The collaboration also includes efforts that may be launched under the Global Framework for Climate Services to support the work of IRENA on renewable energy potentials. WMO provides advice on a modern, inter-operable data management system involving archiving and data service facilities at the national, regional and global levels in support of the work of IRENA on renewable energy potentials and on assessing the possible impacts of climate variability (including extremes) and long-term climate change on the long-

[17] www.worldwatch.org/node/6328.

[18] www.niehs.nih.gov/about/od/programs/cookstoves/global_alliance_for_clean_cookstoves_fact_sheet.pdf.

term sustenance and variability of renewable energy resources. WMO also facilitates the access of IRENA to the operational climate products of its Climate Services Information System.

51. The efforts of the Food and Agriculture Organization of the United Nations (FAO) focus on the Energy-Smart Food for People multi-partner programme and on sustainable bioenergy. The multi-partner programme is a major contributor in respect of agrifood and the green economy and the Sustainable Energy for All initiative. The programme contributes by improving energy efficiency at all stages of the agrifood chain, increasing the use of renewable energy, and improving access to modern energy services through integrated food and energy production. FAO has developed and assisted the development of a number of important tools that support its objectives, including: a framework for calculating fossil fuel use in livestock systems; the UN-Energy Decision Support Tool for Sustainable Bioenergy; the Bioenergy and Food Security Analytical Framework; the Woodfuel Integrated Supply/Demand Overview Mapping; the Bioenergy and Food Security Criteria and Indicators project; and the criteria and indicators for sustainable woodfuel. Examples of FAO energy work with direct impact at the rural community level include: a manual on farm power and mechanization for small-scale farmers in sub-Saharan Africa; a project in Mozambique that showed that small-scale irrigation using solar pumps at the community level has positive impacts, improving food security and income; and a project that improved rural livelihoods through the use of biogas in the Bolivian Altiplano.

52. The United Nations Environment Programme (UNEP) has provided support to countries in promoting new and renewable sources of energy and energy efficiency measures along three main workstreams: assessments and analysis enabling informed, science-based decisions on which sustainable energy paths to follow, defined considering the country specific context; policy tools and institutional support that help to design and implement an appropriate enabling framework for the uptake of sustainable energy technologies and projects; and innovative finance and risk management that addresses specific needs to encourage the uptake of sustainable energy technologies, goods and services in developing countries.

53. The World Health Organization (WHO) is documenting access to clean and renewable energy in the health-care sector at the national level. It has also been raising awareness among countries and other stakeholders about the opportunities for renewable power in health-care facilities, as well as the substantial improvements in the provision of care and health outcomes that such renewable technologies can bring. For close to a decade, WHO has been monitoring and tracking in its global household energy database[19] household use of individual fuels, including both renewables (e.g. wood, agricultural residues, biogas and dung) and non-renewables (e.g. natural gas and liquefied petroleum gas). This database is an important information resource for the tracking and monitoring of Sustainable Energy for All targets in households. WHO is also preparing health air quality guidelines for household fuel combustion which will provide guidance on safe technologies using renewable energy (e.g. advanced combustion stoves) to policymakers, which will serve as a basis for efficiency and safety standards. WHO also provides tools to effectively monitor the air quality and health impacts of renewable energy technologies in the home.

[19] www.who.int/indoorair/health_impacts/he_database/en/index.html.

54. The Economic Commission for Europe (ECE) has developed the renewable energy strategy, designed to promote investment climates for renewable energy technologies, for submission to national and regional authorities in the countries of the Commonwealth of Independent States. Two studies prepared recently by ECE provide analysis relevant for the promotion of renewable energy sources: *Financing Global Climate Change Mitigation*,[20] and *Regional Analysis for Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments*.[21]

55. The Economic and Social Commission for Asia and the Pacific (ESCAP) is developing a project on strengthening South-South cooperation to increase the affordability of sustainable energy options in Asia and the Pacific. The project will address the affordability of sustainable energy options through the promotion of innovative business models to enhance local production, provisioning capacity and affordability of energy products in developing countries. Also, ESCAP is implementing a project, in cooperation with the International Fund for Agricultural Development, to widen access to modern energy services in rural areas using its Pro-Poor Public-Private Partnership model.

56. The Department of Economic and Social Affairs of the United Nations Secretariat is leading and coordinating a public-private partnership initiative, Minimum Electricity Access (Min-E Access), which supports the electrification of rural isolated communities in Africa, Asia and Latin America.

57. International organizations outside the United Nations system have also announced initiatives that support sustainable energy and renewable energy technologies. For example, the European Union announced the "Energizing Development" initiative which will provide access to sustainable energy services to 500 million people by 2030. The initiative includes the creation of a technical assistance facility supported by approximately $63 million in funding over the next two years.

**International finance institutions**

58. International financial institutions continue to play an important role in mobilizing resources for the promotion of new and renewable energy. Their efforts are now being assessed within the framework of the Secretary-General's initiative "Sustainable Energy for All". Multilateral development banks are committing more than $30 billion towards achieving the three goals of the initiative.

59. The World Bank Group has committed to doubling the leverage of its energy portfolio by mobilizing private and public contributions to its supported projects, as well as supportive policies to expand energy access, renewable energy and energy efficiency. The World Bank and the International Finance Corporation are planning to expand existing programmes, such as Lighting Africa which aims to provide lighting to 70 million low-income households by 2020. The World Bank is also undertaking new initiatives, such as the mapping of renewable energy resources in cooperation with the Energy Sector Management Assistance Programme.

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[20] ECE Energy Series No. 37 (ECE/ENERGY/81). Available from http://ynccf.net/pdf/Climate_Finanace/GEE21_GlobalClimateChangeMitigation_ESE37.pdf.

[21] Available from www.unece.org/fileadmin/DAM/energy/se/pdfs/eneff/eneff_pub/EE21_FEEI_RegAnl_Final_Report.pdf.

60. Regional development banks are also playing a crucial role in promoting new and renewable sources of energy. The African Development Bank will invest $20 billion in energy by 2030. It is expected that this commitment will draw an additional $80 billion by partnering with public and private enterprises. Its investments will range from regional projects that benefit multiple countries to small- and medium-scale energy projects that increase access to electricity in rural regions, including through its Sustainable Energy Fund for Africa. The European Bank for Reconstruction and Development has committed $8 billion in energy efficiency projects in Eastern Europe and Central Asia for the next three years.

61. The Global Environment Facility (GEF) has invested over $1.2 billion in more than 200 renewable energy projects in almost 100 developing countries and economies in transition. These investments have been augmented by an additional $8.3 billion in co-financing. In 2010, GEF received a record finance boost from 30 donor countries of $4.25 billion for climate change adaptation and mitigation in the next four years. These initiatives have helped GEF become the largest public sector mechanism for the transfer of renewable energy technology, with investments that have contributed to the installation of more than 3 GW electric capacity and 2.8 GW of thermal capacity based on renewable energy.

**Other institutional arrangements**

62. An important international institution promoting renewable energy is IRENA, which was established in 2009. IRENA has 85 members and 70 signatories and/or countries processing applications for membership, a total of 155 countries. Its mandate promotes the widespread and increased adoption and sustainable use of all forms of renewable energy. IRENA will facilitate access to all relevant renewable energy information, including technical, economic and renewable resource potential data. IRENA will share experience on best practices and lessons learned regarding policy frameworks, capacity-building projects, available finance mechanisms and renewable energy-related energy efficiency measures. Abu Dhabi has been designated as the location for the interim headquarters of IRENA.

63. During 2011 and 2012, IRENA made progress in understanding the political, economic, policy and regulatory environment in which renewable energy competes. Its 2012 work programme includes three subprogrammes: (a) knowledge management and technology cooperation; (b) policy advisory services and capacity-building; and (c) innovation and technology. The Abu Dhabi Fund for Development has made available US$350 million in concessional funding over the next seven years for innovative renewable energy projects approved by IRENA.

## D. Renewable energy for rural isolated communities

64. Although considerable progress has been made in renewable energy technology development and transfer, investment and policy implementation, much more is needed to increase the contribution of renewable sources of energy to rural isolated communities where there may be no other sustainable energy option. Isolated rural communities represent, in most cases, the poorest segment of the population. It is estimated that about 84 per cent of the people without access to modern energy services live in rural areas, still use traditional biomass and lack access to electricity. Many rural areas are very isolated and require decentralized systems.

65. Until recently, almost all rural distributed renewable energy technologies were still too expensive even though they have been recognized as the most sustainable options in some areas. In the past two years, systems and products have been specifically designed to address the needs of the poorest segment of the population, and at an affordable cost. Nevertheless, more support is necessary for capacity-building and technical cooperation programmes that will allow the creation of stable markets for new and renewable sources of energy for isolated rural communities.

66. Specific inexpensive products and systems for households, local industries and services should continue to be designed, developed and customized for markets in the communities with the lowest incomes. The systems and products should be reliable and affordable and must respond to specific needs and practical applications, in accordance with local traditions and lifestyles.

67. Affordability is a critical issue insofar as the capital cost necessary to acquire and install the systems, and their corresponding operating and maintenance costs. The Sustainable Energy for All initiative, with its goal of universal access by 2030, has captured the attention of many stakeholders, including donors, financial institutions and partnerships. The ongoing and announced efforts hold the potential to attract the critical international research and development and innovation support needed to make the systems more efficient, practical and affordable. Partnerships being formed at the international and national levels may provide funds and subsidies to lower the capital costs of the systems, ensuring their affordability at the lowest income levels. Policymakers are also designing and implementing policies in the form of regulations, fiscal incentives and public finance mechanisms that will allow affordable systems.

68. Financial instruments, such as microfinance initiatives and other innovative mechanisms, can be made available at the national level so that renewable energy technologies remain below a cost threshold and can be afforded by people with the lowest incomes.

69. Major population health gains can be expected from the use of efficient and clean renewable fuels in isolated rural settings. In some countries, over 95 per cent of rural households rely on the inefficient use of traditional biomass fuels to meet their most basic energy needs. Similarly, health facilities in rural and remote areas of developing countries are forced to provide vital medical services with little or no power. Efficient renewable energy technologies for rural health-care facilities and households can provide a reliable source of clean and sustainable energy that can improve the lives of isolated populations.

70. Household biogas digesters with latrine attachments have provided households in Nepal with a clean and renewable source of energy for cooking and heating, as well as access to improved sanitation.[22] The use of solar home systems has replaced polluting and health-damaging kerosene lamps in rural households in countries such as Viet Nam. Small off-grid installations of solar panels have made rural health-care facilities energy self-sufficient and have built their resilience for emergency services in a cost-effective way.[23] Solar suitcases from the non-profit organization

[22] WHO *Health in the Green Economy* series, "Household energy sector in developing countries". Available from www.who.int/hia/hgebrief_henergy.pdf.

[23] Ibid., "Health care facilities: preliminary findings — initial review". Available from www.who.int/hia/hgebrief_health.pdf.

WE CARE Solar are economical renewable power units that provide health workers with highly efficient medical light and a power source for medical devices and mobile communication.[24]

71. It is possible to escape the vicious cycle of poverty where people have access to the sustainable energy necessary to conduct all types of productive activities. Universal energy access will help about 1 billion people in rural areas in developing countries to move from the darkness and drudgery which affect them on a daily basis. Without a major change in the current trend, by 2030 the number of people without access will still be close to 900 million, 3 billion will still cook with traditional fuels and 30 million people will have died of smoke-related diseases.[25]

## E. Renewable energy in small island developing States

72. Most small island developing States are highly dependent on imported oil and other fossil fuels for transport and electricity generation. Many of these States are also highly exposed to the environmental impacts associated with fossil fuel consumption, such as oil spills, sea-level rise and increased strength and frequency of hurricanes. Transitioning from fossil fuels to renewable resources not only alleviates these issues by increasing energy security but can also create local industries and opportunities to strengthen their economies.

73. Many small island developing States consider oil dependency a major source of vulnerability as they need to divert scarce financial resources to cover fuel imports instead of using those resources to promote sustainable development and poverty eradication. Nevertheless, many small island developing States have ample renewable energy resources, such as solar, wind, geothermal and ocean potential, which can be used effectively to meet their energy demand.

74. In 2012, States members of the Alliance of Small Island States adopted the Barbados Declaration on Achieving Sustainable Energy for All in Small Island Developing States, which called for universal access to modern and affordable renewable energy services while protecting the environment, ending poverty and creating new opportunities for economic growth. The Declaration includes the voluntary commitments of 20 small island developing States to take action towards providing universal access to energy, switching to renewable energy and reducing dependency on fossil fuels.

75. Examples of the above-mentioned commitments include: the goal of Maldives of achieving carbon neutrality by 2020; the aim of the Marshall Islands to electrify all urban households and 95 per cent of rural outer atoll households by 2015; the commitment by Mauritius to increase the share of renewable energy to 35 per cent or more by 2025; and the goal of Seychelles of producing 15 per cent of its energy supply from renewable sources by 2030.

76. At the 2012 United Nations Conference on Sustainable Development, Aruba announced its transition to 100 per cent renewable energy with the support of the Carbon War Room initiative. Already 20 per cent of the country's energy derives

[24] http://wecaresolar.org/solutions/solar-suitcase/.

[25] Practical Action, *Poor People's Energy Outlook 2012: Energy for Earning a Living* (Rugby, United Kingdom of Great Britain and Northern Ireland, Practical Action Publishing, 2012).

from wind power and there are several solar projects under development. The Smart Island Economies programme of the Carbon War Room, also launched at the Conference, aims to develop a model for a low carbon implementation plan and replicate it across other Caribbean and Pacific islands that may wish to take that pathway.

77. Grenada announced at the Conference a plan for increasing the use of renewable energy as a full replacement for fossil fuels by 2030. The initiative is being undertaken with international organizations, including the Carbon War Room. Grenada wants to depend on renewable energy to meet 100 per cent of its primary energy demand for electricity generation and for transport.

## IV. Conclusions

78. **The accelerated deployment of renewable energy technologies over the past decade indicates their potential for playing a significant role in the future global energy system. Record investments continue to be made by countries to propel innovation, development and commercialization of these technologies. However, the international economic crisis and changing policy environments in some countries are creating new uncertainties and challenges when much more cooperation and action are needed to increase substantially the contribution of these technologies to the global energy system.**

79. **The boom in the growth of the renewable energy industry has not been balanced. Most of the growth is taking place in developed countries and in some developing countries with large emerging economies. Many poor countries with large rural populations have seen only relatively low growth in the use and commercialization of renewable energy technologies.**

80. **New and renewable sources of energy, such as onshore wind, geothermal, small hydropower, biomass and solar photovoltaic, are becoming competitive in some regions. Others are still too expensive but their costs are dropping rapidly, including the costs of some rural off-grid renewable energy technologies.**

81. **The Secretary-General's initiative "Sustainable Energy for All" has already increased global awareness of the importance of energy for sustainable development and has brought the issue to the top of the agenda for decision makers at the national and international levels. By bringing together all key stakeholders to work on a common cause for the common good, the initiative provides a powerful model for the future. The remarkable commitments made in 2011 and 2012 and at the United Nations Conference on Sustainable Development by leaders from government, civil society, communities and the private sector are already making the International Year of Sustainable Energy for All a success by promising programmes and actions for the long-term expansion of the development and use of renewable energy technologies throughout the world. The commitments support the objectives of the initiative of the Secretary-General and represent concrete steps towards the needed transformation of the global energy system.**

82. **Although much of the world is facing major financial austerity programmes, coherent and stable national policies supporting renewable**

**energy should remain in place, be expanded to other countries and extended for a considerable number of additional years. Market mechanisms and investment in research, development and deployment are necessary to ensure: (a) a further reduction in the cost of technologies; (b) the establishment of secure and stable markets; and (c) progress in the transformation of the global energy system towards low-carbon economies.**

83. **The main motivations for a strong deployment of new and renewable sources of energy in most developing countries is to guarantee access to modern energy services to everyone and to satisfy expected rapid increases in energy demand while addressing the global challenge of climate change. Such access is seen as indispensable to accelerating the movement towards green economies within the context of poverty eradication and sustainable development. Affordable and decentralized systems are major incentives for these countries, since their rural populations are the most affected.**

84. **Science-based assessments and analysis, policy support and innovative finance and risk mitigation mechanisms are critical to encouraging the uptake of renewable energy and energy efficiency technologies, which in turn is critical to achieving the three goals of the Sustainable Energy for All initiative.**

United Nations A/67/319

General Assembly

Distr.: General
17 August 2012

Original: English

**Sixty-seventh session**
Item 128 (a) and (e) of the provisional agenda*
**Financial reports and audited financial statements, and reports of the Board of Auditors: United Nations capital master plan**

# Implementation of the recommendations of the Board of Auditors contained in its reports on the United Nations for the biennium ended 31 December 2011 and on the capital master plan for the year ended 31 December 2011

## Report of the Secretary-General

*Summary*

The present report provides additional information in response to the recommendations of the Board of Auditors as contained in its report on the United Nations for the biennium ended 31 December 2011 and its report on the capital master plan for the year ended 31 December 2011. The report is submitted in accordance with paragraph 7 of General Assembly resolution 48/216 B, in which the Assembly requested the Secretary-General to report to it at the same time as the Board of Auditors submitted its recommendations to the Assembly on measures taken or to be taken to implement those recommendations.

The Administration has concurred with many of the Board's recommendations, and most of the comments of the Secretary-General have been duly reflected in the reports of the Board. Therefore, in an effort to reduce redundancy and streamline documentation, the present report provides additional comments from the Administration only where required, as well as information on the status of implementation, the office responsible, the estimated completion date and the priority for each recommendation contained in the reports of the Board of Auditors. In addition, the present report contains updated information on the status of implementation of the recommendations of the Board for prior periods that were reported by the Board as not having been fully implemented in the annexes to its reports.

* A/67/150.

12-46768 (E) 200912

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# Contents


| | | Page |
|---|---|---|
| I. | Introduction | 3 |
| II. | United Nations | 4 |
| | A. Implementation of the recommendations contained in the report of the Board of Auditors on the United Nations for the biennium ended 31 December 2011 | 4 |
| | B. Implementation of the recommendations contained in the report of the Board of Auditors on the United Nations for the prior financial period | 23 |
| III. | Capital master plan | 31 |
| | A. Implementation of the recommendations contained in the report of the Board of Auditors on the capital master plan for the year ended 31 December 2011 | 31 |
| | B. Implementation of the recommendations contained in the report of the Board of Auditors on the capital master plan for the prior year | 37 |

# I. Introduction

1. In paragraph 7 of its resolution 48/216 B, the General Assembly requested the Secretary-General to report to it on the measures that would be taken to implement the recommendations of the Board of Auditors at the same time as the reports of the Board were submitted to the Assembly. Accordingly, the present report is submitted in response to the recommendations of the Board contained in its report on the United Nations for the biennium ended 31 December 2011 (A/67/5 (Vol. I), chap. II). and in its report on the capital master plan for the year ended 31 December 2011 (ibid., Vol. V).

2. In preparing the present report, account was taken of the provisions of the following General Assembly resolutions:

(a) Resolution 48/216 B, in particular paragraph 8, in which the Assembly requested the Secretary-General to draw attention in his reports to the recommendations that would require action by the Assembly;

(b) Resolution 52/212 B, in particular paragraphs 3 to 5, and the note by the Secretary-General transmitting the proposals of the Board for improving the implementation of its recommendations approved by the Assembly (A/52/753, annex);

(c) Resolution 65/243 A, in which the Assembly, in paragraph 17, reiterated its request for inclusion by the Secretary-General in future reports of information on the setting of time frames, the identification of office holders to be held accountable and priorities for implementation of the recommendations of the Board and, in paragraph 16, reiterated its request that the Secretary-General provide full explanation for delays in implementation of the recommendations of the Board for prior periods, in particular those recommendations not yet fully implemented that are two or more years old.

3. With regard to prioritization, it is noted that the Board categorizes the most important recommendations as "main" recommendations. While all accepted recommendations of the Board will be implemented in a timely manner, the main recommendations will be considered of a high priority.

4. Given that the Administration has concurred with most of the Board's recommendations and that many of its comments have been duly reflected in the reports of the Board of Auditors, detailed comments are provided only where considered necessary for recommendations from the financial period ended 31 December 2011. However, in accordance with paragraph 16 of resolution 65/243 A, additional information will be provided for all recommendations for prior periods that were considered by the Board not to have been fully implemented.

5. In accordance with the above-mentioned resolutions, section II of the present report contains the information requested by the General Assembly on the implementation of the recommendations contained in the reports of the Board of Auditors on the United Nations. Section II.A provides information on the implementation of the recommendations of the Board for its report for the biennium ended 31 December 2011, while section II.B provides information on the implementation of recommendations that the Board considered not fully implemented from its report for the biennium ended 31 December 2009.

6. Section III of the present report provides information on the implementation of the recommendations contained in the reports of the Board of Auditors on the capital

master plan. Section III.A provides information on the implementation of recommendations contained in the Board's report for the year ended 31 December 2011, and section III.B provides information on the implementation of recommendations in the Board's report for the year ended 31 December 2010 that were considered by the Board not to have been fully implemented (A/66/5 (Vol. V)).

# II. United Nations

## A. Implementation of the recommendations contained in the report of the Board of Auditors on the United Nations for the biennium ended 31 December 2011

### Overview

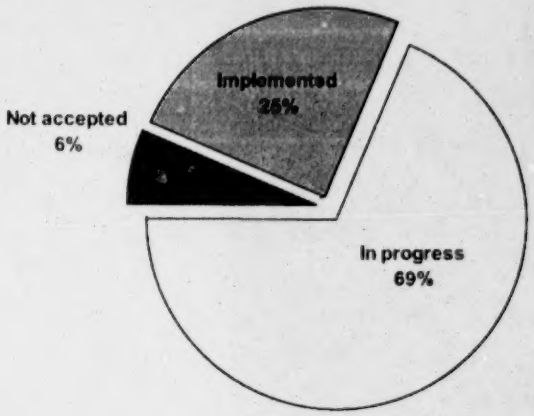
7. Set out below is the information requested by the General Assembly on the status of implementation of recommendations contained in the report of the Board of Auditors on the United Nations for the biennium ended 31 December 2011 (A/67/5 (Vol. I)). Most of the Administration's comments have already been included in the Board's report; thus, additional comments are provided below only where required.

8. Tables 1 and 2 summarize the status of implementation of recommendations as at August 2012.

Table 1
**Status of implementation of main recommendations**

| *Department responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 12 | 1 | 4 | 7 | 7 | – |
| Office for the Coordination of Humanitarian Affairs | 2 | – | – | 2 | 2 | – |
| Office of Internal Oversight Services | 1 | – | – | 1 | 1 | – |
| Multiple departments | 1 | – | – | 1 | 1 | – |
| **Total** | **16** | **1** | **4** | **11** | **11** | **–** |

Figure I
**Status of implementation of main recommendations**

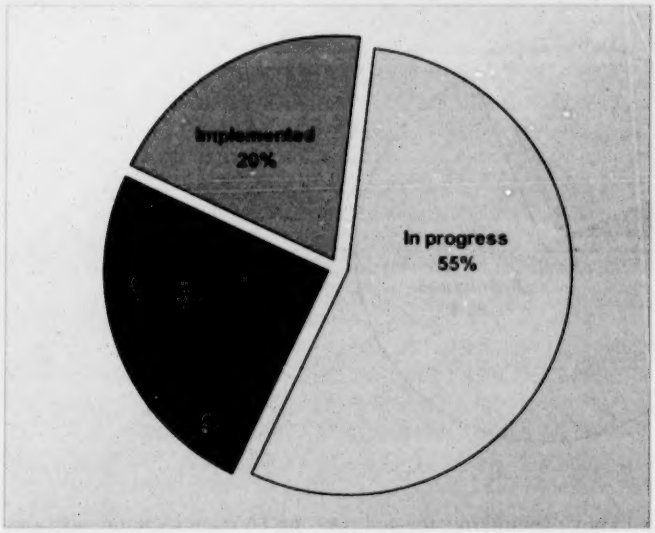



9. Table 1 and figure I above summarize the status of the 16 main recommendations of the Board. Four recommendations have been implemented, 1 recommendation has not been accepted and 11 recommendations are in progress. Of the 11 that are in progress, 3 are set for implementation by the end of 2012, 5 by the end of 2013 and 3 by the second quarter of 2014.

Table 2
**Status of implementation of all recommendations**

| *Department responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 23 | 7 | 5 | 11 | 11 | – |
| Office for the Coordination of Humanitarian Affairs | 4 | – | 1 | 3 | 3 | – |
| Office of Internal Oversight Services | 4 | 2 | – | 2 | 2 | – |
| Department of Political Affairs | 3 | – | 1 | 2 | 2 | – |
| United Nations Office at Vienna | 1 | – | 1 | – | – | – |
| United Nations Office at Geneva | 1 | – | – | 1 | 1 | – |
| Multiple departments | 4 | 1 | – | 3 | 3 | – |
| **Total** | **40** | **10** | **8** | **22** | **22** | **–** |

Figure II
**Status of implementation of all recommendations**




10. Table 2 and figure II above summarize the status of all 40 recommendations of the Board. Eight recommendations (20 per cent) were implemented, 10 (25 per cent) were not accepted and 22 (55 per cent) are in progress. Of the 22 recommendations that are in progress, 11 are set for implementation by the end of 2012, 7 by the end of 2013 and 4 after January 2014.

**Detailed information on implementation status**

11. **In paragraph 16, the Board recommended that, without waiting for the implementation of the new enterprise resource planning system (Umoja), the Administration enhance the internal documentation on the preparation of the financial statements.**

12. The Administration informed the Board that this recommendation was not accepted as the financial statements are prepared in accordance with detailed year-end instructions, supplemented by structured guidance on various accounting tasks. Furthermore, the task is performed within the built-in functions of the Integrated Management Information System (IMIS), supplemented by the Sun system. As such, the Administration does not see the need to devote additional resources to develop any further guidance under the United Nations system accounting standards. However, the year-end guidance and procedures in preparation for the adoption of the International Public Sector Accounting Standards (IPSAS) are being developed and customized.

13. It should also be noted that IPSAS implementation while in transition to Umoja, necessitates the development of policies and procedures compatible with IPSAS. Therefore, there is no need to marginally improve documentation on current workflow under the United Nations system accounting standards.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

14. **In paragraph 31, the Administration agreed with the Board's recommendation that the Office for the Coordination of Humanitarian Affairs strengthen its project management procedures to ensure regular review, verification and reporting of project expenditures to enable it to obtain timely and sufficient assurance and control over expenditure, confirmation that funds have been used for the intended purposes, and hence assurance over the accuracy of its recording in the financial statements.**

15. The Administration agreed to improve the timeliness of receipt of progress and final financial reports; reduce the delays in conducting audits and closing projects; and increase the number of field monitoring visits, particularly to projects assessed as high risk. Also, the Administration will develop a risk-based approach to the oversight and management of implementing partners.

16. The Administration will enhance its controls to monitor the projects implemented in the field through the following measures: (a) receiving written confirmation from non-governmental organization implementing partners in the field that recommendations from auditors are fully implemented before new emergency response fund projects are approved for funding; (b) putting in place a database for project cycle management by the second quarter of 2013; (c) developing and implementing an emergency response fund monitoring and reporting framework by the end of 2012; (d) developing a risk-assessment and risk-management methodology for emergency response funds by the end of 2012; and (e) monitoring compliance with the emergency response fund global guidelines, once they are approved in the third quarter of 2012.

*Department responsible*: Office for the Coordination of Humanitarian Affairs
*Status*: In progress
*Priority*: High
*Target date*: Second quarter of 2013

17. **In paragraph 32, the Administration agreed with the Board's recommendation that it, in collaboration with the Office for the Coordination of Humanitarian Affairs, identify and implement the lessons from how other agencies of the United Nations system operate control and accounting regimes over third-party expenditures.**

18. The Administration agreed to identify and implement the lessons from how other United Nations system agencies operate control and accounting regimes over third-party expenditures.

*Department responsible*: Office for the Coordination of Humanitarian Affairs
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

19. **In paragraph 34, the Administration agreed with the Board's recommendation that it, in collaboration with the Office for the Coordination of Humanitarian Affairs, rigorously review its accounting treatment for**

**recording expenditures via executing agencies and make any necessary changes of accounting policy no later than 2014.**

20. The Administration agreed to implement any necessary changes in the accounting policy on recording expenditures via executing agencies not later than 2014. The Administration will also review the current policy and appropriately update it in line with the IPSAS implementation.

*Department responsible*: Office for the Coordination of Humanitarian Affairs/ Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Second quarter of 2014

21. **In paragraph 41, the Administration agreed with the Board's recommendation that the Office of the United Nations High Commissioner for Human Rights (OHCHR) and the Office for the Coordination of Humanitarian Affairs establish proper end-of-year reconciliation procedures to ensure the accurate recording of expenditures where cost plans are used to establish obligations in local field offices.**

22. OHCHR follows established year-end reconciliation procedures in order to control its expenditures. Further, OHCHR explained on numerous occasions to the audit team that it considers its expenditure recording to be accurate and defendable and requested the auditors to suggest an alternative methodology. No alternative has been forthcoming to date and OHCHR will continue to use its existing methodology and further refine its year-end procedures accordingly.

23. The Office for the Coordination of Humanitarian Affairs will establish procedures to reconcile field obligations on a quarterly basis, ensuring that appropriate adjustments and/or cancellations are made. This procedure will support the proper end-of-year reconciliation and accurate recording of expenditures.

*Department responsible*: Office for the Coordination of Humanitarian Affairs
*Status*: In progress
*Priority*: Medium
*Target date*: Third quarter of 2012

24. **In paragraph 45, the Administration agreed with the Board's recommendation that in readiness for IPSAS implementation, the United Nations review and improve its asset records in support of land and buildings, with a view to assigning a valuation to individual buildings, prior to 1 January 2014.**

25. Following the PricewaterhouseCoopers consultancy, the Administration prioritized existing resources on a temporary basis to establish a Property Management Unit that will support IPSAS readiness efforts within the Organization. Two temporary staff members at the P-3 level are on board as of July 2012 and the rest of the team is expected to be on board within the next two to three months. In close consultation with IPSAS and Umoja, the Unit will establish policies and procedures on the valuation of assets from a property management perspective, including land and buildings. Work is already under way, which is supported by Umoja, on the development of a staging database to collect such records.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2013

26. **In paragraph 49, the Administration agreed with the Board's recommendation that the United Nations Office at Geneva: (a) undertake an adequate physical inventory check within each financial period, including the inventory of its clients; and (b) establish standard operating procedures for initial recording of all newly acquired assets.**

27. The Support and Asset Management Unit in the United Nations Office at Geneva is currently conducting physical checks of non-expendable property items for all its clients. The exercise started in 2010 and will be completed by October 2012. During the period, the Unit has performed this operation for 37 entities, and 51,000 items are already physically inventoried. In future, physical inventory checks will be conducted within each financial period. Since June 2012, a method has been developed to check all newly acquired non-expendable property assets whose purchase operation is initiated in the ProcurePlus system. Follow-up verification is also conducted to confirm the inventory tagging of these items. Based on the experience gained, standard operating procedures are being drafted and should be ready by the end of the year.

*Department responsible*: United Nations Office at Geneva
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

28. **In paragraph 51, the Administration agreed with the Board's recommendation that more generally, the Administration, as part of its preparations for the implementation of IPSAS, consider how it can strengthen internal controls within the existing inventory management system, with clearly defined processes and responsibilities for asset owners.**

29. Reference is made to the Administration's comments above relating to the recommendation in paragraph 45 of the Board's report.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2013

30. **In paragraph 55, the Board recommended that the Administration consider how it can strengthen central oversight over payroll transactions, giving due consideration to the costs and benefits. That could be achieved by establishing processes to centrally record all elements of pay and benefits paid to staff, cross referencing to documentation held in local offices, to a maintain a clear audit trail and support payroll payments.**

31. The Department of Management, in collaboration with the Department of Field Support, will review current processes in the context of the upcoming Umoja implementation in local offices.

*Department responsible*: Department of Management/Department of Field Support
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2015

32. **In paragraph 59, the Board recommended that United Nations Assistance Mission for Iraq (UNAMI) perform monthly reconciliations between the physical inventory held in each warehouse and the field asset management system (Galileo).**

33. UNAMI will comply with the frequency of once per annum as recommended by the Department of Field Support. UNAMI believes that monthly physical counts and reconciliations are not necessary. However, the Mission will implement a quarterly regime until such time as the system stabilizes. The estimated target date for the first round of the reconciliations is the end of September 2012.

*Department responsible*: Department of Political Affairs
*Status*: In progress
*Priority*: Medium
*Target date*: Third quarter 2012

34. **In paragraph 61, the Administration agreed with the Board's recommendation that UNAMI work with the Treasury to expedite the closure of the bank accounts which are no longer required.**

35. UNAMI presently maintains accounts with Citibank only. All other UNAMI bank accounts that are no longer required have been closed by the United Nations Treasury.

*Department responsible*: Department of Political Affairs
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

36. **In paragraph 64, the Administration agreed with the Board's recommendation that UNAMI and the United Nations Assistance Mission in Afghanistan (UNAMA) establish effective risk management arrangements involving: (a) clear identification of risks and assessment for probability and impact; and (b) assigning clear accountability and responsibility for the management of risks, including developing and implementing appropriate mitigation strategies.**

37. UNAMA provided documentary evidence of the risk register, identifying and assessing the 13 key financial risks facing the Mission to the Board of Auditors on 12 May 2012. The risk register assigns clear accountability and responsibility for the management of the risks and provides full details of the applicable risk-mitigation strategies.

38. UNAMI will develop a risk register covering all the major functions and relevant responsibilities for managing the risks assigned to appropriate personnel.

*Department responsible*: Department of Political Affairs
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

39. **In paragraph 70, the Board recommended that OHCHR: (a) in collaboration with the Office of Programme Planning, Budget and Accounts, seek ways to reduce the reliance of mandate holders on extrabudgetary funding and other forms of earmarked or unearmarked support; (b) seek ways in which to demonstrate more robustly that mandated activities regarding special procedures are undertaken independently, are of equal importance, and not unduly influenced by the source of funds; and (c) in the interest of transparency, propose to the Human Rights Council that mandate holders be required to disclose all sources of funding and any conditions attached to them.**

40. The audit team was informed by OHCHR that special procedures are human rights mechanisms established by the Human Rights Council to address specific country situations or global themes. Mandate holders are appointed by the Council after a rigorous selection process and serve in their independent and expert capacities. They receive no direct remuneration from the United Nations. The primary source of finance for the work of mandate holders is the United Nations regular budget and, as such, any extrabudgetary funds used for the work of mandate holders is supplementary; OHCHR does not consider that the source of these supplementary funds influences the work of the relevant mandate holder. The Human Rights Council has not given any guidance to mandate holders on the disclosure of resources (which are mostly support in kind) received from donor Governments. Mandate holders are not required to report to OHCHR or the Human Rights Council on such support. OHCHR provides full details of any extrabudgetary funding provided to mandate holders through its annual report. Support, financial or in kind, provided to mandate holders outside OHCHR does not engage an obligation to report. As mandate holders are selected on the basis of their independence and integrity, it is implausible that this support could impair their independence.

41. In addition, the Department of Management notes that OHCHR does report in great detail on all contributions received and any earmarking in different forums, for example, its annual report, which is available to all Member States and the Human Rights Council, and regularly at informal meetings. The recommendation that OHCHR propose to the Human Rights Council that financial income be disclosed — in this case, it could be the personal income of the mandate holder — would need to be assessed from a legal perspective.

*Department responsible*: Office of the High Commissioner for Human Rights/ Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

42. **In paragraph 78, the Board recommended that the Administration: (a) provide senior management, on at least an annual basis, with clear analysis and explanations of the reasons for the level of cash and investments held; and (b) develop an investment strategy that sets out the United Nations cash requirements and the resulting optimum level of investments that should be held to underpin the delivery of United Nations activities.**

43. As the Board pointed out, the United Nations is a complex, decentralized organization made up of entities and offices away from Headquarters and missions and projects across the globe. The amount of cash and investment balance held at each office/programme level is based on budget spending authorizations (allotments) and

upon the contributions of Member States and/or donors and how those contributions match outlays. It should be noted that decisions to undertake United Nations activities are not linked to or based on cash (investment) balances, instead, they are based on allotments for each location and on workplans, which are issued on a yearly basis. The United Nations Treasury provides a centralized service for investments. The cash pool mechanism allows the Treasury to invest assets centrally in a diversified investment pool of interest earning assets that allows for its participants to have same-day liquidity while earning a competitive rate of return. The Administration agrees with part (a) of the recommendation. With regard to part (b) of the recommendation, the Administration will review the current investment strategy for further improvements, as necessary.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Second quarter of 2013

44. **In paragraph 80, the Board recommended that the Administration review the disclosures in future financial statements with a view to providing more detailed commentary on the reasons for the increased holdings of investments and cash pools.**

45. The Administration agrees with the Board's recommendation and will evaluate with the Board if the disclosure will be presented in the financial statements or in the financial report.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Second quarter of 2013

46. **In paragraph 87, the Administration agreed with the Board's reiterated recommendation that it strengthen the internal controls over inactive trust funds and expedite the closing of those funds.**

47. The Office of Programme Planning, Budget and Accounts notes that the issue of closure of trust funds is under regular review and follow-up with offices. The closing of trust funds is also subject to the response/agreement from the respective donor countries to the Administration's request to close the trust fund and therefore delays in the process, if any, may arise owing to some donors not responding on time.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

48. In paragraph 89, the Administration agreed with the Board's recommendation that the Office for the Coordination of Humanitarian Affairs undertake a review of its system for recording and accounting for pledges to ensure that sufficient controls are in place to account for pledges in a timely manner in order to ensure the completeness and accuracy of the associated disclosures in the financial statements.

49. The Office for the Coordination of Humanitarian Affairs has documented and circulated a new process to record donor pledges for future years at the time of

receipt of the pledge and has ensured that all pledges are recorded in IMIS in line with the Financial Regulations and Rules.

*Department responsible*: Office for the Coordination of Humanitarian Affairs
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

50. **In paragraph 95, the Administration agreed with the Board's recommendation that it require all staff to have undertaken contract management training prior to taking up contract management responsibility. Such training should cover key aspects of contract management, such as contract administration, vendor relationship management, risk management and performance evaluation and management.**

51. The Administration notes that the Board accepted its comments, but rejects the assumption under paragraph 94 that if "54 per cent of contract managers had not undertaken any training in contract management [in the United Nations], [it creates] the risk that those responsible for delivering best value from the United Nation's $2.6 billion worth of contracts lack the skills and experience to do so". In that context, staff recruited to undertake contract management positions have previous relevant experience and knowledge in this area of expertise, which is verified during the recruitment process by the requisitioners.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

52. **In paragraph 98, the Administration agreed with the Board's recommendation that the Administration include specific, measurable and relevant key performance indicators, linked to payment, in every contract to cover all key aspects of the goods or services to be delivered.**

53. In paragraph 97 of its report, the Board stated it found that only 50 per cent of contracts examined included key performance indicators to measure contractor performance. The Administration cannot accept the percentage provided by the Board without the substantiating data. Most of the United Nations contracts, unless the Procurement Division assesses a very low risk to the Organization, include either Specific Measurable Attainable Relevant and Time-bound (SMART) key performance indicators or other forms of performance measurements that are linked to payment, such as liquidated damages for late deliveries, rights of the United Nations to set off amounts from contractor's invoices or redeem upon the performance bond in case of non-performance by a contractor, and so on.

54. The Procurement Division introduced a new template for the Source Selection Plan. The Source Selection Plan is an internal document that describes critical components of the acquisition process and provides justification for sourcing and procurement decisions in order to achieve the best value for money principle. The Procurement Officer and Requisitioner are jointly responsible for contributing and preparing the source selection plan before the solicitation documents are issued. The source selection plan template (annex D-32 to the Procurement Manual), provides the option to include an overview of key performance indicators, which will become part of the contract. The objective of such is that the requisitioner will provide these

key performance indicators at the beginning of the solicitation process, to ensure that they can be part of the solicitation documents and will be included in the contract.

55. Through the use of the source selection plan, the Procurement Division is already facilitating the use of key performance indicators in contracts. The Procurement Division and the requisitioner are involved in defining these criteria, but the ultimate responsibility for providing these key performance indicators lies with the requisitioner. Furthermore, the Procurement Division believes that such indicators should be specific for each contract, and not every contract lends itself for the use of SMART key performance indicators. According to United Nations model contracts, payment shall be made upon receipt of the contractor's invoice and supporting documentation and certification by the United Nations that the goods/services represented by the invoice have been provided and that the contractor has otherwise performed in conformity with the terms and conditions of the contract. If such provisions are included in the contract as part of the terms and conditions, this already allows the United Nations to withhold payment if the performance criteria are not met.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

56. **In paragraph 103, the Administration agreed with the Board's recommendation that the Procurement Division maintain a central record of all completed vendor performance evaluations and follow up overdue evaluations to enable proper maintenance of the approved vendor register and facilitate the improved selection of vendors invited to bid.**

57. In view of the comments in paragraph 104 of the Board's report, the Administration considers the recommendation as fully implemented.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

58. **In paragraph 107, the Board recommended that the Administration immediately assign and communicate clear responsibility to contract managers for: (a) identification of contract risks; (b) assessment of the impact (including probable costs) and likelihood of a risk materializing; (c) identification and implementation of actions to manage or mitigate the risk; and (d) continued monitoring of risks as they evolve throughout the life of the contract.**

59. The Administration would like to clarify that the provisions of the Procurement Manual, in chapter 15, already assign clear responsibility to contract managers for the identification of contract risks; the assessment of the impact and likelihood of risk materialization; the identification and implementation of actions to manage or mitigate risks; and the continued monitoring of risks throughout the contract life. Furthermore, the template for the source selection plan (as described in para. 54 above) also allows for the inclusion of risk factors. The objective is to identify in an early stage of the procurement process any risks that can occur either during the procurement process itself, or during the contract management phase.

The United Nations Contracts and General Conditions of Contracts have many provisions and options to mitigate various risks involved, for example, the use of securities ("performance bond"), the right of set-off, approval of subcontractor, non-exclusivity, and so forth. In addition, reference is made to peacekeeping contracts of which the requisitioning department, the Department of Field Support, issued the Contract Management Policy to guide its contract managers.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

60. **In paragraph 108, the Board also recommended that the Administration establish oversight of the risk profile of either the whole population of contracts or groups of contracts so that it can assure itself that: (a) contract management resources are appropriately focused on the highest risk contracts; and (b) high-risk contracts are managed at the appropriate level.**

61. Each requisitioning department establishes mechanisms to exercise oversight of the contract management risks of its portfolio.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

62. **In paragraph 109, the Board further recommended that the Administration, either through a central function or within individual requisitioning departments, establish a clear escalation process to senior management for significant contract risks whereby senior management is kept aware as significant risks become more probable and can act quickly in order to mitigate the risk or minimize its impact.**

63. Reference is made to the Administration's comments above relating to the recommendation in paragraph 108 of the Board's report.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

64. **In paragraph 116, the Administration agreed with the Board's recommendation that it strengthen its oversight of competitive procurement by: (a) more robustly challenging the need for contract renewals, use of waivers and ex post facto approval; and (b) utilize its contracts database to flag up when contracts are approaching key trigger points, such as termination, and actively remind requisitioning departments that timely action is needed; and (c) identify which departments are routinely using waivers and ex post facto approvals and engage with them to improve their procurement planning.**

65. In response to the Board's sample review of procurements at the United Nations Office at Vienna and the United Nations Office at Nairobi, the Administration informs as follows: the Procurement Section of the United Nations Office at Vienna, using its contracts database, sends automated notifications six months prior to the expiry date of a contract. Following the clear segregation of duties stipulated in the

Procurement Manual, the Procurement Section routinely sends courtesy reminders to requisitioning departments indicating that a contract is approaching the expiry date and informing the requisitioning departments, should there be a continuous requirement for the service, to raise a requisition to facilitate the necessary procurement action. The Procurement Section also reminds substantive offices to complete a vendo. performance report and submit the completed form so that the Procurement Section can assess vendor performance. The vendor performance report is used to consider the extension of a contract and/or the issuance of bidding documents. Although the Procurement Section repeatedly solicits inputs from requisitioning offices, sometimes the necessary inputs are not received on time.

66. At the United Nations Office at Nairobi, all waivers regardless of value and all ex post facto cases go to the Chief Procurement Officer for approval, following which they are kept on file for reporting purposes. Enhancements to contracts database to include automated contract expiry alerts are in progress. Data from the files will be used for periodic reporting to the relevant heads of departments.

*Department responsible*: United Nations Office at Nairobi/
United Nations Office at Vienna
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

67. **In paragraph 121, the United Nations Office at Vienna agreed with the Board's recommendation that all procurement delegations be brought up to date and clearly communicated to all relevant staff.**

68. All of the procurement delegations were updated as of April 2012.

*Department responsible*: United Nations Office at Vienna
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

69. **In paragraph 128, the Board recommended that the Department of Management urgently clarifies the authority of the United Nations Office at Nairobi for undertaking procurement on behalf of the United Nations Environment Programme (UNEP) and the United Nations Human Settlements Programme (UN-Habitat).**

70. In April 2012, the Assistant Secretary-General of the Office of Central Support Services led an independent review team from the Department of Management to review the administrative structure of the United Nations Office at Nairobi, UNEP and UN-Habitat. The mandate of the review team included the review of the governance structure for the procurement function and their recommendations are being considered by all parties for their possible implementation.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

71. **In paragraph 130, the Administration agreed with the Board's recommendation that the Department of Management review the delegations**

**granted to the United Nations offices at Geneva and Vienna to ensure that delegated procurement authority is sufficiently clear.**

72. The Administration accepted this recommendation and will review the current practices of conducting procurement functions on behalf of the other entities with a view to updating the delegations granted to the United Nations Office at Vienna and the United Nations Office at Geneva, as applicable.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Second quarter of 2013

73. **In paragraph 134, the Board stated that the United Nations offices at Vienna and Nairobi agreed with its recommendation that they enhance their procurement performance data by defining their information needs and implementing enhancements to systems; as a minimum, these should allow the procurement sections to group and analyse their caseloads by number, nature, value and complexity of requests, and by originating section, including field offices.**

74. The Procurement Section of the United Nations Office at Vienna is currently able to report on the caseload by the nature and value of requests by originating section, including field offices, as well as on waivers and ex post facto cases. The complexity of cases will be defined by the scope of the terms of reference in each case and the anticipated delivery date. Information technology support has been sought to enable complexity of cases to be categorized as well as for monitoring the time taken for the procurement to be finalized against the agreed dates in the source selection plans.

75. A review of the workflow of the procurement processes at the United Nations Office at Nairobi is currently in progress. The Administration anticipates that the results of that review will allow the Procurement Section to define information needs more accurately and identify particular processes that lend themselves to automation.

*Department responsible*: United Nations Office at Nairobi/
United Nations Office at Vienna
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

76. **In paragraph 145, the Board stated that the Administration agreed with its recommendation that the Administration: (a) develop more outcome-focused objectives and indicators of achievement; (b) establish clear chains from indicators of resource use and activity, through indicators of output to achievement of high-level objectives; and (c) make subparagraphs (a) and (b) above a clearly articulated responsibility of the Under-Secretaries-General for their respective departments.**

77. While the Administration accepted parts (a) and (b) of the above recommendation, part (c) was not accepted. It should be noted that the logical framework contained in the proposed programme budget for the biennium represents the outcome/position arising from the legislative review by the various

relevant sectoral, functional and regional intergovernmental bodies, the Committee for Programme and Coordination and the General Assembly. While the Secretariat continues to improve subsequent logical frameworks based on the recommendations made by the above legislative bodies and various internal and external audit bodies, the final logical framework used for the preparation of the proposed programme budget reflects what has been approved through the above intergovernmental process. Accordingly, although the Secretariat may propose more outcome-focused objectives and indicators of achievement, during the legislative review process, revisions to the Secretariat's proposals are made if Member States do not agree or if the proposals appear to measure the performance of individual Member States, which would run counter to General Assembly resolution 64/243 A, wherein the Assembly requested the Secretary-General to ensure that, in presenting the programme budget, expected accomplishments and, where possible, indicators of achievement are included to measure achievements in the implementation of the programmes of the Organization and not those of individual Member States.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

78. **In paragraph 148, the Board recommended that the Administration present the General Assembly with proposals to simplify the programme planning process, and realign the timing of the agreement of the strategic frameworks so that they reflect the Organization's current priorities.**

79. In respect of the Board's view that it is essential that the strategic framework, which sets out the Organization's aims for each biennium, is current and relevant, it is recalled that the General Assembly, in its resolution 58/269, requested the Committee for Programme Coordination, in performing its programmatic role in the planning and budgeting process, to review the programmatic aspects of new and/or revised mandates subsequent to the adoption of the biennial programme plan, as well as any differences that arose between the biennial programme plan and the programmatic aspects of the proposed programme budget. Accordingly, future developments emanating from either sectoral, functional, regional or legislative reviews that would entail a change in the proposed or approved strategic framework is made available to the Committee for Programme Coordination and the General Assembly for their review. This process ensures that the strategic framework is updated to reflect current changes. For example, by its resolution 65/259, the General Assembly established a new section 37 — United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) effective 1 January 2011 (in the middle of the biennial budget cycle). This affected the approved strategic framework under subprogramme 2, Gender issues and advancement of women, and of programme 7, Economic and social affairs, for the period 2010-2011. In May of the same year, a consolidated report on the changes to the biennial programme plan as reflected in the programme budget for the biennium 2010-2011 and the proposed programme budget for the biennium 2012-2013 (A/66/82) was submitted to the Committee for Programme and Coordination and the General Assembly for their review and approval to reflect the updates.

80. In respect of the Board's comment on the timing realignment, the Administration further reiterates that the current process is governed by existing mandates and any changes would require the approval of the General Assembly.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

81. **In paragraph 153, the Board recommended that the Administration include an executive summary in its programme performance report, or produce one as a separate document, in order to give a concise summary of the key issues which the data evidences.**

82. The Administration did not accept this recommendation. The programme performance report is submitted for the consideration of the Committee for Programme and Coordination as one report and the Administration does not see the need to prepare a separate document to provide a concise summary of key issues. This will result in an additional document to be considered by the intergovernmental bodies with no added value. Should the Committee consider that a summary of this nature was needed, it would have requested the same in one of its reports that are subsequently submitted for approval by the General Assembly.

83. The Administration would like to reiterate that section II of the programme performance report, entitled "Overview of key results achieved by the United Nations" already provides a summary of the key results achieved by the Organization as well as of the outputs delivered and resources utilized during the reporting period. The Committee for Programme and Coordination, in its report issued following the conclusion of its fifty-second session (A/67/16), took note of the overview section in relation to item 3 (a), Programme performance: "special mention was made of section II of the report, since it provided a good overview of the accomplishments of the Secretariat". The Administration does not see the need to prepare a separate summary document as this will only result in added costs with no added value.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

84. **In paragraph 155, it was stated that the Administration agreed with the Board's recommendation that it consider how it can better integrate financial and performance reporting, at all levels in the Organization, and build that into its thinking about the design and implementation of the new enterprise resource planning system (Umoja), and as part of realizing the benefits from both Umoja and the improved information that will be provided through adoption of IPSAS.**

85. The Administration did not agree with the recommendation, however. It should be noted that in line with its terms of reference, the Committee for Programme and Coordination is mandated to review programme performance but not financial performance and the Advisory Committee on Administrative and Budgetary Questions is mandated to review financial performance, not programme performance. The consolidation of both the programme performance and financial

performance reports will require an amendment to the existing terms of reference for both Committees. By extension, if financial performance is provided in the programme performance, then the proposed strategic frameworks should also include the related budget estimates, which would run counter to General Assembly resolution 58/269. It should also be noted that the Secretary-General, in his report entitled "Strengthening the United Nations: an agenda for further change — improvements to the current process of planning and budgeting" (A/58/395 and Corr.1), proposed, inter alia, to link estimated resource requirements at the planning stage. The General Assembly did not agree with the inclusion of the budget outline as part of the strategic framework in its resolution 58/269, as concerns were expressed that the proposal to link the plan to the budget outline would amount to imposing, at the planning stage, budget ceilings on programme requirements (see A/C.5/58/SR.18).

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: High
*Target date*: Not applicable

86. **In paragraph 157, the Administration agreed with the Board's recommendation that it assign specific responsibility for the successful implementation of results-based management methodology throughout the Secretariat to a relevant member of the senior management team.**

87. The implementation of results-based management would be the subject of internal discussion in the next few months, with the view to developing a road map for its implementation. In this context, responsibility for the implementation of results-based management would be assigned to a member of the senior management team.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: First quarter of 2013

88. **In paragraph 171, the Administration agreed with the Board's recommendation that, to provide assurance that the system of internal control is understood and operating as expected, it: (a) document the internal control framework; and (b) consider developing a management assurance system which requires managers at all levels to periodically provide senior management assurance on the effectiveness of internal controls in their sphere of control to test both understanding and compliance at all levels.**

89. In response to the Secretary-General's report entitled "Towards an accountability system in the United Nations Secretariat" (A/64/640), which contained a detailed proposal for the adoption of a comprehensive enterprise risk management and internal control framework for the Organization, the General Assembly, through resolution 64/259, provided a clear mandate to enhance the current capabilities in the Secretariat responsible for risk assessment and mitigation and internal control.

90. Following an extensive consultation process, on 25 May 2011, the Management Committee approved a policy that outlines the purpose, governance mechanisms and principles that will guide the adoption of the enterprise risk

management and internal control framework. A detailed methodology describing the activities to be performed for the effective implementation of the framework has also been defined, based on best international standards and practices, adopting elements and recommendations from both the Committee of Sponsoring Organizations of the Treadway Commission enterprise risk management framework and the ISO 31000 standards.

91. Based on the policy and report of the Secretary-General (A/66/692), as noted by the Board, the Under-Secretary-General for Management will serve as the high-level official responsible for leading the enterprise risk management effort in the Secretariat and the Management Committee will act as the senior management Enterprise Risk Management Committee. Responsibility for the effective implementation of risk management and internal control practices for their respective areas will remain with the heads of departments and offices. Within the limited dedicated resources currently available, the Secretariat is proceeding with the gradual implementation of enterprise risk management practices in selected departments of the Organization representing its different functional areas of activity, according to a phased approach.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: First quarter of 2014

92. **In paragraph 176, the Administration agreed with the Board's recommendation that in support of existing work on developing risk management in the United Nations, the Management Committee: (a) periodically identify the top risks facing the Organization and communicate that information to all managers; and (b) develop high-level and regular (monthly) reporting on the current status of the risks and associated mitigating strategies.**

93. Reference is made to the Administration's comments above relating to the recommendation in paragraph 171 of the Board's report.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: First quarter of 2014

94. **In paragraph 183, the Administration agreed with the Board's recommendation that United Nations senior management set out an action plan addressing the key lessons identified by the Board on business transformation, to demonstrate and track how it is developing and implementing a more strategic and holistic grip on the direction and delivery of the business transformation programmes.**

95. The Administration agreed with this recommendation and is now developing an action plan to address the issues identified by the Board.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

96. **In paragraph 195, the Board recommended that any proposal for the level and deployment of resources of the Office of Internal Oversight Services (OIOS) Investigations Division is underpinned by a cost-benefit analysis and options appraisal which takes into account the total cost of delivering investigations to the United Nations as a whole, not just the cost to OIOS.**

97. OIOS concurred with the need to conduct a cost-benefit analysis. As outlined in the report of OIOS (A/66/755), ongoing initiatives including an independent expert panel of the Investigations Division dictated that a cost-benefit analysis and options proposal would be best addressed in the 2013-2014 support account. OIOS, however, does not concur with the recommendation to take into account the total cost of delivery investigations to the United Nations as a whole, as any such consideration is beyond the perimeters of the OIOS mandate and/or support account.

*Department responsible*: Office of Internal Oversight Services
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

98. **In paragraph 199, the Board recommended that any future proposal for the level and deployment of OIOS investigative resources which assumes that investigation work will be conducted by bodies other than OIOS take into account the capacity of those bodies to deliver investigations and the cost of their doing so.**

99. OIOS concurred with the assessment only in relation to category I allegations that have been referred to the missions for follow-up. However, any other considerations are beyond the perimeters of the OIOS mandate and/or support account.

*Department responsible*: Office of Internal Oversight Services
*Status*: Not accepted
*Priority*: Medium
*Target date*: Not applicable

100. **In paragraph 204, the Administration agreed with the Board's recommendation that OIOS formally consult with stakeholders, including mission staff and investigators, to capture and analyse their views on the most cost-effective deployment of OIOS investigative resources.**

101. OIOS has distributed communications to all investigators within OIOS and all special representatives of the Secretary-General, the Department of Peacekeeping Operations and the Department of Field Support. Upon receipt of responses, they will be analysed and considered in relation to the 2013-2014 support account and the most cost-effective deployment of OIOS resources.

*Department responsible*: Office of Internal Oversight Services
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

102. **In paragraph 210, the Administration agreed with the Board's recommendation that OIOS assess the potential for fraud and other violations across the United Nations and take that into account when evaluating the optimal level and deployment of investigative resources required to fulfil its mandated responsibilities.**

103. The capacity of the Investigations Division of OIOS to address potential fraud and other violations is first being assessed by the independent expert panel. Optimal levels of resources and deployment of resources will stem from the Panel's recommendations, in combination with the feedback received from the peacekeeping missions.

*Department responsible*: Office of Internal Oversight Services
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

## B. Implementation of the recommendations contained in the report of the Board of Auditors on the United Nations for the prior financial period

### Overview

104. In paragraph 16 of its resolution 65/243A, the General Assembly requested the Secretary-General to provide a full explanation for delays in the implementation of the recommendations of the Board for prior periods, in particular those recommendations not yet fully implemented which are two or more years old.

105. In the annex to chapter II of its report for the biennium ended 31 December 2011, the Board provided a summary of the status of implementation of recommendations for the prior financial period. Information is provided below on the 24 recommendations shown as "partially implemented" and "not implemented". The information is set out in the order in which the recommendations are presented in the annex.

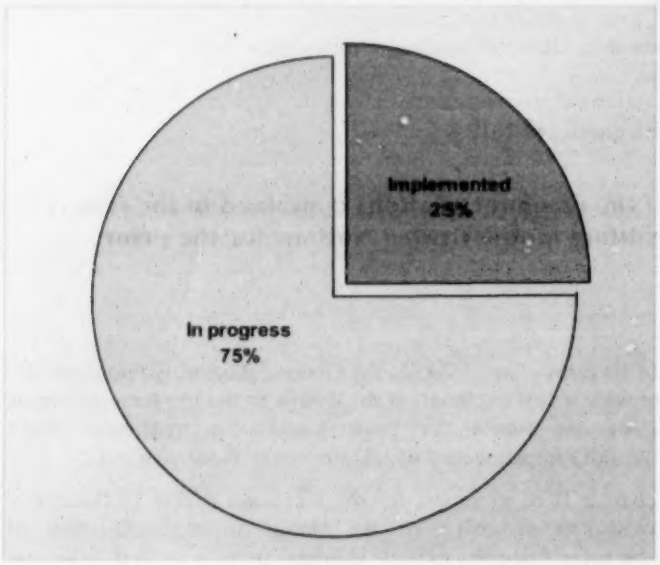
106. The following table summarizes the overall situation.

Table 3
**Status of implementation of recommendations for the prior period considered not fully implemented in the annex to chapter II of the report of the Board of Auditors for the biennium ended 31 December 2011**

| *Department responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 13 | – | 2 | 11 | 10 | 1 |
| Department of Economic and Social Affairs | 1 | – | 1 | – | – | – |
| Department for General Assembly and Conference Management | 2 | – | – | 2 | 2 | – |
| Office of Internal Oversight Services | 1 | – | – | 1 | 1 | – |
| United Nations Peacekeeping | 1 | – | – | 1 | 1 | – |
| Department of Safety and Security | 2 | – | – | 2 | 2 | – |
| International Court of Justice | 2 | – | 2 | – | – | – |
| Conference on Trade and Development | 1 | – | 1 | – | – | – |
| Ombudsman and Mediation Services | 1 | – | – | 1 | 1 | – |
| **Total** | **24** | **–** | **6** | **18** | **17** | **1** |

Figure III

**Status of implementation of recommendations for the prior period considered not fully implemented in the annex to chapter II of the report of the Board of Auditors for the biennium ended 31 December 2011**




107. As indicated in table 3 and figure III above, of the 24 recommendations shown in the annex to chapter II of the Board's report as either partially implemented or not implemented, 6 (25 per cent) have been implemented and 18 (75 per cent) are in progress. Of the 18 recommendations in progress, 7 are set for implementation by the end of 2012, 3 by the end of 2013, 7 after January 2014 and 1 has no target date as it pertains to ongoing activities.

**Detailed information on implementation status**

**Report of the Board of Auditors on the United Nations for the biennium ended 31 December 2009**

108. **In paragraph 25 of its report (A/65/5 (Vol. 1)), the Board recommended that the Secretariat (a) plan for the automated preparation of the financial statements under Umoja; and (b) without waiting for the implementation of Umoja, enhance internal documentation on the preparation of the financial statements and, more generally, on all financial procedures, notably by updating the Financial Manual.**

109. The process through which financial statements are prepared will be significantly enhanced under Umoja. At present, financial statements are prepared in accordance with detailed year-end instructions, supplemented by structured guidance on various accounting tasks. Further, the task is performed within the built-in functions in IMIS, supplemented by the Sun system. As such, the Administration does not see the need to devote additional resources to develop any further guidance under the United Nations system accounting standards. At the same

time, however, the Administration plans to issue the Finance and Budget Manual in 2012.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2015

110. **In paragraph 62, the Board recommended that the Secretariat define a strategy to streamline and further automate the management of voluntary contributions, along the lines of the redesign of assessed contributions procedures.**

111. The target date was revised in line with Umoja deployment schedule.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Third quarter of 2015

112. **In paragraph 66, the Administration agreed with the Board's recommendation to develop indicators to measure the processing times of contributions.**

113. The target date was revised in line with Umoja deployment schedule.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Third quarter of 2015

114. **In paragraph 98, the Board recommended that the Secretariat strengthen internal control over the inactive technical cooperation trust funds and expedite the closing of those funds that need to be closed.**

115. Of the 80 funds pertaining to technical cooperation trust funds reflected in annex III to the Board's report (A/65/5 (Vol. I)), 61 funds were closed by 31 May 2012; 2 funds were reactivated; 5 funds are being retained for potential resumed activity and 12 funds are in the process of being closed pending final settlement with the United Nations Development Programme.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

116. **In paragraph 121, the Board recommended that the Secretariat ensure that the United Nations Assistance to the Khmer Rouge Trials (UNAKRT) sets up a dashboard for all parties that contain the main indicators (vacancy rate for posts, turnaround time and productivity for the translation unit, turnaround time and productivity for processing requests for complainants).**

117. UNAKRT continues to provide performance statistics in the quarterly reports to the Steering Committee. In January 2012, UNAKRT formulated a performance dashboard for the Court for 2011 in line with the Board's recommendation. Similar dashboards are to be formulated for future years on an ongoing basis.

*Department responsible*: Department of Economic and Social Affairs
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

118. **In paragraph 135, the Board recommended that the United Nations Conference on Trade and Development (UNCTAD): (a) prepare a management manual for technical cooperation projects that brings together all applicable procedures, in particular in the area of monitoring; and (b) make sure that progress reports are distributed to donors by the Technical Cooperation Service as stipulated in the funding agreements.**

119. UNCTAD has fully implemented this recommendation with the finalization of the manual entitled "Mainstreaming results-based management in technical cooperation projects", in June 2012.

*Department responsible*: United Nations Conference on Trade and Development
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

120. **In paragraph 146, the Board recommended that the Administration strengthen the internal controls over the inactive general trust funds and expedite the closing of those funds that need to be closed.**

121. Eight funds were closed; two funds were reactivated; and four funds should not have been classified as inactive owing to their nature. The Office of Programme Planning, Budget and Accounts coordinates, as necessary, with substantive offices to initiate the closure of trust funds that are no longer required and in this regard, continues to follow up periodically with concerned offices.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

122. **In paragraph 156, the Administration agreed with the Board's recommendation that it: (a) increase the frequency contractual audits of health claims; and (b) examine ways to strengthen internal controls over claim reimbursements.**

123. Health claim audits are conducted approximately every three years; the next audit is therefore scheduled for 2013.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2013

124. **In paragraph 160, the Administration agreed with the Board's recommendation that it strengthen internal controls to ensure the accuracy of its payable and receivable balances with counterpart entities as at the end of the financial period.**

125. The target date was revised in line with the deployment schedule for Umoja.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Third quarter of 2015

126. **In paragraph 164, the Administration agreed with the Board's recommendation that it reduce the time taken for certifying invoices so as to conform to accrual-based accounting.**

127. The implementation of Umoja will further facilitate the tracking of the status of received invoices.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2015

128. **In paragraph 191, the Administration agreed with the Board's recommendation that it consider a revision of its policy for the valuation of leave liability in its implementation of the International Public Sector Accounting Standards.**

129. In the context of ongoing discussion with the Board on the IPSAS policy framework, the target date has been revised.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

130. **In paragraph 203, the Administration agreed with the Board's recommendation that it review the logical framework of results-based budgeting with a view to making it more precise.**

131. The Administration considers this recommendation implemented as this is an ongoing task and notes that in this regard, the logical framework as found in the proposed programme budget for the biennium represents the outcome/position arising from the legislative review by the various sectoral, functional and intergovernmental bodies, the Committee for Programme and Coordination, and the General Assembly. While the Administration continues to improve subsequent logical frameworks based on the recommendations made by the above legislative bodies and various internal and external audit bodies, the final logical framework used for the preparation of the proposed programme budget is that approved through an intergovernmental process. Accordingly, to make changes to the presentation would require approval of the General Assembly.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

132. **In paragraph 274, the Administration agreed with the Board's recommendation that it ensure that the Department for General Assembly and Conference Management urgently implements a plan for the transition phase of**

**the capital master plan, in order to have precise knowledge of the needs and to provide operational tools to deal with them.**

133. The capital master plan is an ongoing project, and the Department remains very much involved with its progress in order to anticipate and to meet with any changes or consultations needed to ensure a smooth-running operation.

*Department responsible*: Department for General Assembly and Conference Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2015

134. **In paragraph 286, the Administration agreed with the Board's recommendation to issue a Secretary-General's bulletin setting out the organization and responsibilities of the Department of Safety and Security, including those of the Division of Headquarters Security and Safety Services.**

135. As a result of the biennium budget for 2012-2013 that was recently approved by the General Assembly, there will be changes in the staffing structure in the Department. This will have an effect on the Secretary-General's bulletin, which will need to incorporate those changes before being finalized. Significant progress has been made with respect to the Secretary-General's bulletin. A first draft has been circulated and additional comments are being sought.

*Department responsible*: Department of Safety and Security
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

136. **In paragraph 329, the Board recommended that the Administration regularize on an ex post facto basis the procurement actions that the United Nations Integrated Peacebuilding Office in Sierra Leone undertook before it obtained delegation of procurement authority.**

137. The implementation of the recommendation is in progress. The final case was deferred and the Procurement Division, in coordination with the Mission, are working on the case resubmission.

*Department responsible*: Department of Peacekeeping Operations/ Department of Field Support
*Status*: In progress
*Priority*: Medium
*Target date*: First quarter of 2013

138. **In paragraph 336, the Board recommended that the Administration strengthen and expedite the reconciliation process between the physical inventory data and the accounting data relating to non-expendable property to ensure a fair valuation of these items in the notes to the financial statements.**

139. The reconciliation issues at Headquarters outlined by the Board in its report for the biennium ended 31 December 2009 were addressed in the course of the biennium 2010-2011. The related adjustments were reflected accordingly in the financial statements as at 31 December 2011. The Administration therefore considers the recommendation implemented. The Administration continues to verify non-expendable property records at Headquarters through comprehensive physical inventories. The

2012 physical inventory has been completed and discrepancy reports were sent to all heads of departments for further verification and assessment. The Administration is also pursuing the implementation of the action plan it prepared in accordance with previous audit recommendations and the PricewaterhouseCoopers consultancy report. Existing resources have been prioritized on a temporary basis to establish a Property Management Unit that will support IPSAS readiness efforts and address recognized policy and procedure property management issues within the Organization. Two temporary staff members at the P-3 level are on board as of July 2012 and the rest of the team is expected to be on board within the next two to three months.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

140. **In paragraph 387, the Board recommended that the Administration draw up a schedule by which the staff members who have not taken the mandatory training programmes be obliged to do so in a close time limit (one year or 18 months), and that the effective implementation be verified.**

141. Effective monitoring and follow up to ensure compliance with mandatory training cannot be implemented until a comprehensive monitoring system is in place by means of the Inspira learning management system — now anticipated for rollout from mid-2012 through mid-2013.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Second quarter of 2013

142. **In paragraph 390, the Board recommended that the Administration ensure that all departments and offices draw up and document a medium- and short-term staff training strategy that would identify needs and objectives, and carry out a qualitative analysis of the results obtained.**

143. A revised learning and development strategy will be required once the comprehensive mobility policy for Secretariat staff is agreed. However, this is dependent on agreement by the General Assembly: they are due to take it up in fall 2012 but it is not possible to predict when they will reach agreement and when it would be possible to draw up this strategy.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Ongoing

144. **In paragraph 409, the International Court of Justice agreed with the Board's recommendation that it consider the revision of the statutory aspects of the Instructions for the Registry.**

145. The amendments to the Instructions for the Registry were reviewed by the International Court of Justice Rules Committee and approved by the Court in March 2012.

*Department responsible*: International Court of Justice
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

146. **In paragraph 413, the Court agreed with the Board's recommendation that it update the Staff Regulations for its Registry.**

147. The International Court of Justice Staff Regulations were updated and promulgated on 17 March 2011 (including the promulgation of the new United Nations Staff Regulations and Rules applicable to the Registry), with the exception of article 10 of the International Court of Justice Staff Regulations and related chapter X of the United Nations Staff Rules applicable to the Registry (pertaining to disciplinary measures), which was later reviewed by the International Court of Justice Rules Committee and approved by the Court in March 2012.

*Department responsible*: International Court of Justice
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

148. **In paragraph 437, the Administration agreed with the Board's recommendation that it take appropriate measures to ensure that the "Carbon" project is interfaced with Umoja.**

149. According to the latest implementation plan, the Department for General Assembly and Conference Management offices will go live with Umoja in stages between 1 May 2013 and 31 December 2014, with United Nations Headquarters scheduled for 1 May 2014 to 31 July 2014.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2014

150. **In paragraph 449, the Administration agreed with the Board's recommendation that it ensure that the Office of the United Nations Ombudsman and Mediation Services guarantee, while drawing up its new tracking mechanisms, that the data used to measure the activity and the performance of the Office be auditable, while preserving confidentiality.**

151. An external review of the Office was conducted in May and June 2012. The external review experts found that the database itself should not be accessed directly because it contains confidential names and case details. However, it has been agreed that aggregated statistical information showing the caseload and performance of the Office can be provided. This solution recognizes the Board's request for data to measure the activity and performance of the Office and its recognition of the need to preserve confidentiality of the clients.

*Department responsible*: Office of the United Nations Ombudsman and Mediation Services
*Status*: In progress
*Priority*: High
*Target date*: Third quarter of 2012

152. **In paragraph 456, the Board recommended that the Office of Internal Oversight Services further increase its completion rate of audit assignments, inter alia, by reducing the rate of vacancy of its posts.**

153. OIOS continues to focus on improving the quality of its audits, which means, inter alia, completing audits in optimum time. OIOS has also introduced more realistic planning assumptions. Previously, the Internal Audit Division planned on the basis of full staffing. The Division currently has a target vacancy rate for 2012 of 15 per cent and the 2012 audit workplan is based on the expected average-vacancy rate. Streamlining of work practices will also result in the more rapid completion of audits and an improved completion rate. Improved planning, reduced vacancies and improved practices will lead to a high completion rate.

*Department responsible*: Office of Internal Oversight Services
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

154. **In paragraph 481, the Administration agreed with the Board's recommendation that it ensure that the Department of Safety and Security analyses security costs and independently of contributing budgets (regular budget, extrabudgetary funds, budgets allocated by each agency to security) so as to have a complete view of resources allocated to security.**

155. The High-level Committee on Management's Working Group on Security and Safety Costs has not yet concluded its work. Regular updates on its work have been provided to the Inter-Agency Security Management Network. Significant progress has been made in terms of identifying all the various budget modalities found within the Department of Safety and Security, and the Working Group intends to present its conclusions to the High-level Committee at the end of September 2012. In addition, a transparent review of security costs has been conducted by the Department and was subject to extensive discussion within the Inter-Agency Security Management Network.

*Department responsible*: Department of Safety and Security
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

# III. Capital master plan

## A. Implementation of the recommendations contained in the report of the Board of Auditors on the capital master plan for the year ended 31 December 2011

### Overview

156. Set out below is the information requested by the General Assembly on the status of implementation of recommendations contained in the report of the Board of Auditors on the capital master plan for the year ended 31 December 2011 (A/67/5 (Vol. V)). As indicated in the summary of the present report, most of the

Administration's comments have already been included in the Board's report; thus, additional comments are provided below only where required.

157. Tables 4 and 5 below summarize the status of implementation of the main recommendations and all recommendations, respectively, as at August 2012.

Table 4
**Status of implementation of main recommendations**

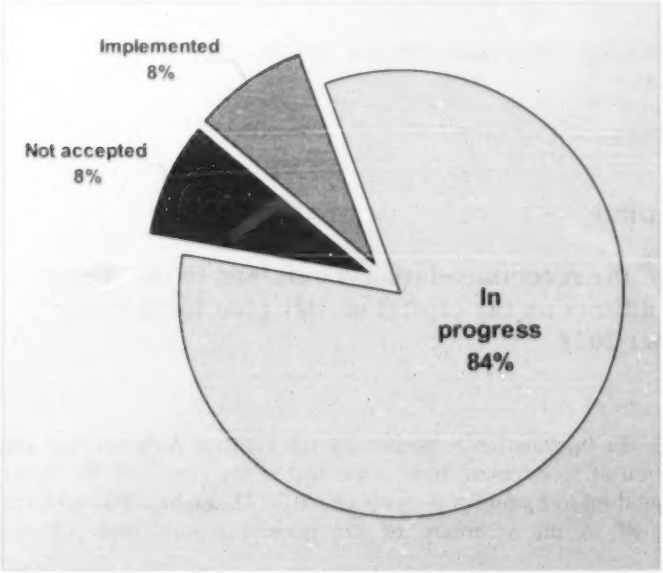
| *Office responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 4 | 1 | – | 3 | 3 | – |
| **Total** | **4** | **1** | **–** | **3** | **3** | **–** |

158. Of the four main recommendations referred to in table 4 above, one was not accepted, two are targeted for implementation by the end of 2012 and one by the end of 2015.

Table 5
**Status of implementation of all recommendations**

| *Office responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 12 | 1 | 1 | 10 | 10 | – |
| **Total** | **12** | **1** | **1** | **10** | **10** | **–** |

Figure IV
**Status of implementation of all recommendations**



159. As indicated in table 5 and figure IV above, of the 12 recommendations made by the Board in its report on the capital master plan, 10 (84 per cent) are in progress, while 1 (8 per cent) was implemented and 1 (8 per cent) was not accepted by the Administration. Of the 10 recommendations that are in progress, 7 are set for implementation by the end of 2012, 2 by the end of 2013 and 1 by the end of 2015.

**Detailed information on implementation status**

160. **In paragraph 28, the Administration agreed with the Board's recommendation that it develop a cost-time trade-off criterion, to guide decisions on whether it is worth making acceleration payments or better value for money to accept a delay.**

161. The Administration is developing a policy and procedure methodology concerning the decision to use acceleration in order to meet project schedule milestones.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

162. **In paragraph 32, the Administration agreed with the Board's recommendation that it urgently take stock and rebuild the anticipated final cost of the project. The rebuilt anticipated final cost should include estimates for the likely cost of:**

(a) **Identified project risks;**

(b) **Change orders until project completion;**

(c) **Acceleration activities in order to meet the project schedule;**

(d) **Claims that have been submitted and an allowance for future claims;**

(e) **Up-to-date estimates for remaining guaranteed maximum price contracts (by revalidating prices and setting a realistic level of contingency based on the outturn experiences of previous guaranteed maximum price contracts);**

(f) **The costs for altering off-site office locations to the extent that they will be met by the capital master plan budget.**

163. The Administration is developing a methodology which will allow it to rebuild the anticipated final cost of the project, including the elements specified in the Board's recommendation.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

164. **In paragraph 34, the Administration agreed with the Board's recommendation that the anticipated final cost be recalculated and reported on a quarterly basis from now until the project's completion.**

165. Upon the implementation of the recommendation in paragraph 32 of the Board's report as stated above, the Administration will recalculate and report on the anticipated final cost of the project on a quarterly basis, as recommended.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Third quarter of 2014

166. **In paragraph 35, the Board further recommended that senior management in the Administration put in place appropriate controls such that they can clearly demonstrate to the General Assembly that assurance can be placed on the reported cost forecasts.**

167. The Under-Secretary-General for Management, in conjunction with the Assistant Secretary-General for the Capital Master Plan and the Controller, will establish appropriate controls in order to demonstrate to the General Assembly that assurance can be placed on the reported anticipated final cost of the project.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

168. **In paragraph 41, the Administration agreed with the Board's recommendation that once it has prepared a complete and robust anticipated final cost, it should set out the timeline for all remaining project commitments, being clear about the effect that delayed, or partial, release of funding will have on the costs and timing.**

169. Upon the implementation of recommendation contained in paragraph 32 of the Board's report as stated above, the Administration will establish a timeline for all remaining project commitments until the end of the project.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2012

170. **In paragraph 50, the Administration agreed with the Board's reiterated recommendation that it:**

(a) **Resolve the security issues and lack of a viable design solution for the Library and South Annex buildings as a matter of urgency;**

(b) **If the two buildings are proposed to remain in scope, make clear what the approach to resolving the security challenges should be;**

(c) **Seek approval for their proposed course of action from the General Assembly.**

171. Although discussions with the host country will continue, the forthcoming tenth annual progress report will recommend the continued suspension of design and renovation of the Library and South Annex buildings until a permanent solution to the identified security issues can be found.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

172. **In paragraph 51, the Administration agreed with the Board's recommendation that, if the Library and South Annex cannot remain in scope, it present the General Assembly with costed options for accommodating the facilities which are currently housed in these buildings. The Administration committed to implement this recommendation at the sixty-seventh session of the General Assembly.**

173. Upon a decision by the General Assembly concerning the Library and South Annex buildings, costed options will be presented to the Assembly as recommended by the Board.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Second quarter of 2013

174. **In paragraph 52, the Administration agreed with the Board's recommendation that it seek approval from the General Assembly for any proposals to reduce the scope of planned work to the General Assembly Building. The Administration committed to implement this recommendation at the sixty-seventh session of the General Assembly.**

175. The Administration agrees that any potential reduction in the scope for the General Assembly Building will be submitted to the General Assembly for its approval.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

176. **In paragraph 55, the Board recommended that the Administration urgently establish more effective and regular governance over the capital master plan. The Under-Secretary-General for Management needs to determine how he can assure himself that cost and progress forecasts are accurate, especially where areas of technical construction judgement are involved. The Board is aware that typically, in a project of this nature, senior management would be supported by expert advice which is independent of the project team.**

177. The capital master plan is presently managed with clear lines of supervision and accountability. The Office of the Capital Master Plan is headed by an Executive Director, at the Assistant Secretary-General level, who is responsible for the management and implementation of the capital master plan project. This official is supervised by and is accountable to the Under-Secretary-General for Management, who is responsible to the Secretary-General in discharging his functions. Establishing a Steering Committee could blur the lines of accountability and delay the decision-making process.

178. What the project needs at this stage is a strong execution process, transparent lines of communication with all stakeholders, and responsible budget management,

including monitoring, control and evaluation; all of which are guaranteed under the present managerial structure. All of these are supported by robust audit systems and oversight, which the project has already.

179. The Administration trusts that the Board is aware that progress of the capital master plan — including its budgetary matters — is presently subject of periodic reviews by the Management Committee; and also that the capital master plan has a Steering Committee on Associated Costs that meets regularly to review and coordinate the temporary costs of certain other departments which are incurred in support of the capital master plan but which were not included in the approved budget of the capital master plan. Accordingly, the Administration does not see the need for establishing an additional committee.

*Department responsible*: Department of Management
*Status*: Not accepted
*Priority*: High
*Target date*: Not applicable

180. **In paragraph 62, the Administration agreed with the Board's recommendation that, drawing on the lessons from the capital master plan, it consider how in future it can manage contingency funding on capital projects in a more transparent and effective manner.**

181. The Office of the Under-Secretary-General for Management has agreed with the Office of the Capital Master Plan that the latter will develop a "lessons learned" analysis of the capital master plan project addressing, inter alia, the management of contingency funds and this analysis will inform the management of contingency funds for other capital projects.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2014

182. **In paragraph 76, the Administration agreed with the Board's reiterated recommendation that the Office of the Capital Master Plan significantly reduce the processing time and backlogs in the change order approvals process.**

183. The Administration has implemented this recommendation, and will continue to seek additional reductions in the processing time for the review and approval of change orders.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

184. **In paragraph 83, the Administration agreed with the Board's recommendation that the Department of Management: (a) pilot the implementation of flexible working strategies which move away from a one-person to one-desk ratio; and (b) assess the potential operational and financial impact of adopting flexible workplace strategies to reduce the future space needs of the United Nations in the context of any proposals for renovating existing, or acquiring new, office space.**

185. A new policy on flexible working arrangements is being developed by the Office of Human Resources Management to be presented to the General Assembly. In this context, a pilot has been carried out which has shown that a number of staff are keen to take up flexible working arrangements, which might in the future have an impact on space requirements. However, given that the policy is completely voluntary and no extra costs may be incurred by the Organization as a result of flexible working arrangements (ST/SGB/2003/4), it would not be feasible at this stage to use such arrangements to reduce the future space needs of the United Nations as the requirements at any point could change significantly. In the future, depending on the extent of usage, it might be possible for individual departments to manage flexible working arrangements in a manner that could lead to less space requirements. However, once the new policy on flexible working arrangements has been developed and agreed by the General Assembly, it might be possible to gather data on its uptake in order to see if there would be positive implications with regard to space requirements.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Fourth quarter of 2015

## B. Implementation of the recommendations contained in the report of the Board of Auditors on the capital master plan for the prior year

### Overview

186. In paragraph 16 of its resolution 65/243 A, the General Assembly reiterated its request that the Secretary-General provide full explanation for delays in implementation of the recommendations of the Board for prior periods, in particular those recommendations not yet fully implemented that are two or more years old.

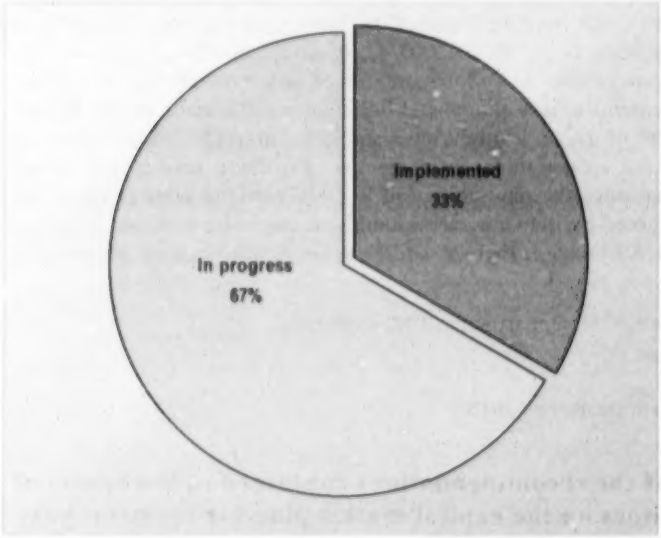
187. In annex III to its report for the year ended 31 December 2011, the Board provided a summary of the status of implementation of recommendations for the year ended 31 December 2010. Information is provided below on the 12 recommendations indicated as "under implementation" or "not implemented" in annex III, set out in the order in which the recommendations were presented.

188. Table 6 and figure V below summarize the overall situation.

Table 6
**Status of implementation of recommendations for the prior period considered not fully implemented in annex III to the report of the Board of Auditors for the biennium ended 31 December 2011**

| *Office responsible* | *Number of recommendations* | *Not accepted* | *Implemented* | *In progress* | *Target date set* | *No target date* |
|---|---|---|---|---|---|---|
| Department of Management | 12 | – | 4 | 8 | 8 | – |
| **Total** | **12** | **–** | **4** | **8** | **8** | **–** |

Figure V
**Status of implementation of recommendations for the prior period considered not fully implemented in annex III to the report of the Board of Auditors for the biennium ended 31 December 2011**




189. As indicated in table 6 and figure V above, of the 12 recommendations stated in annex III to the Board's report for the year ended 31 December 2011 as in progress, 4 (33 per cent) have been implemented and 8 (67 per cent) are still in progress. Of the 8 recommendations in progress, 4 are set for implementation by the end of 2012, 2 by the end of 2013 and the other 2 after January 2014.

**Detailed information on implementation status**

**Report of the Board for the year ended 31 December 2010**

190. **In paragraph 33 of its report (A/66/5 (Vol. V)), the Board recommended that the Office of the Capital Master Plan significantly reduce the processing time and backlogs in the change order approvals process, so that contractors get paid within the timescales stated in their contracts or, where contracts are silent on this matter, within 30 days after completing a change order. The latter is consistent with the time allowed to make payment under a guaranteed maximum price contract.**

191. The Administration has implemented this recommendation, and will continue to seek additional reductions in the processing time for the review and approval of change orders. The Administration reduced the time spent on processing and approval of change orders by introducing a weekly review meeting chaired by the Assistant Secretary-General for the capital master plan project. The weekly meetings are attended by the Construction Manager's staff, the Programme Manager's staff and capital master plan staff. All participants provide their inputs to achieve the resolution of individual change orders within 30 working days. This approach proved to be effective in reducing the time spent on approval of change orders. The backlog

was cleared during November 2011 through February 2012, as evidenced by the spike in the volume of change orders processed. The Board of Auditors was provided with the change orders data and latest statistics.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

192. **In paragraph 38, the Board recommended that the Administration, working with the Office of the Capital Master Plan:**

(a) **Immediately review the change orders trends, identify the reasons and source of requests for changes;**

(b) **Establish clear rules, strong governance and robust management to minimize occupier-driven changes.**

193. The Administration has implemented this recommendation. The Board of Auditors was provided with the change orders data and latest statistics. The Office of the Capital Master Plan reviewed the trend and provided reasons for all change orders. The occupier-driven change orders are naturally diminishing as the Secretariat Building is close to its substantial completion in early September 2012. The Office of the Capital Master Plan continues to work on consistent reduction of time spent on the review and approval of change orders.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: High
*Target date*: Not applicable

194. **In paragraph 47, the Board also recommended that the Administration consider ways to retain expertise from the Office of the Capital Master Plan to support the handover to the Facilities Management Service.**

195. The Office the Capital Master Plan has already initiated a plan to retain core critical staff specializing in planning, designing, construction management and administration to facilitate a smooth transition for handover to the Facilities Management Service. Regular meetings are held between the Office and the Facilities Management Service on various issues relating to design and construction, with a view to ensuring that the Facilities Management Service staff are involved in the development of the new requirements to maintain and support intensive installations such as the buildings management system and the permanent broadcast facility, which are associated with the capital master plan renovation works. The Facilities Management Service recruited a former capital master plan project manager to head the Overseas Properties Management Unit. In his current capacity, he acts as custodian of lessons learned from the capital master plan and other recent construction projects and will leverage this experience in the development of the capital strategic review and in his project manager role on overseas construction projects.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

196. **In paragraph 59, the Board recommended that the Administration:**

(a) **Resolve the security issues and lack of a viable design solution for the Library and South Annex buildings as a matter of urgency;**

(b) **Confirm whether the two buildings are to remain in scope, and, if so, what the approach to resolving the security challenges should be;**

(c) **Seek approval for their proposed course of action from the General Assembly.**

197. Although discussions with the host country will continue, the forthcoming tenth annual progress report will recommend the continued suspension of design and renovation of the Library and South Annex buildings until a permanent solution to the identified security issues can be found. Further developments in this area are subject to a decision by the General Assembly during its sixty-seventh session.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: First quarter of 2013

198. **In paragraph 60, the Board also recommended that the Administration prioritize the approvals process and timings for the remaining guaranteed maximum price contracts and amendments, to achieve the 42-day elapsed time assumed in the schedule.**

199. The Administration is making every effort to reduce the preparation and approvals process for guaranteed maximum price contracts, but has noted that owing to complexity of the guaranteed maximum price contract preparation and negotiation process, the 42-day elapsed time might not be achievable. The Procurement Division prepared an analysis for the seven guaranteed maximum price contracts or guaranteed maximum price phases executed since the Board's prior report in July 2011, showing an average elapsed time of 153 days. If the further six guaranteed maximum price contracts or guaranteed maximum price phases executed since the beginning of 2011 are added, the average elapsed time reduces to 148 days.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

200. **In paragraph 70, the Board recommended that the Office of the Capital Master Plan strengthen the approach to cost forecasting by including a robustly calculated and auditable estimate for the costs of all change orders until project completion, by allowing for the most likely costs of the items in the risk register, and for other known issues, such as prolonged property rentals arising from the schedule slippage.**

201. The commitment schedule presented to the Fifth Committee and the Board of Auditors in March 2012 makes provisions for known and unknown change orders as two separate items on the commitment schedule. The Board was informed that the Office of the Capital Master Plan had established and follows a regular cost estimate review process:

(a) On a weekly basis, the projected costs for all live guaranteed maximum prices are updated;

(b) On a monthly basis, all project costs are reviewed and the levels of contingency remaining on each project are reviewed;

(c) All projected fees are updated on a monthly basis; the only two subprojects that have not had a thorough review are the Dag Hammarskjöld Library renovation and South Annex renovation, which are on hold.

202. Provision for the prolonged property rentals was included in the estimated cost to complete, which was presented to the General Assembly during the sixty-sixth session, in November 2011, and during the resumed sixty-sixth session, in March 2012. The project cost estimates are being updated and will be presented in the tenth annual report of the capital master plan during the sixty-seventh session of the General Assembly. The annual risk assessment will be conducted in October 2012 and the Office of the Capital Master Plan will seek to develop a methodology to quantify risks, in order to assess whether the balance of contingency for remaining work is adequate. The outcome of this exercise and contingency requirements will be presented to the General Assembly for its consideration.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: High
*Target date*: Second quarter of 2013

203. **In paragraph 73, the Board recommended that the Office of the Capital Master Plan: (a) review its approach to allowing for the effects of future construction price inflation in line with published indices; and (b) clarify and simplify its reporting in this area when little or no inflation is expected.**

204. The approach to contingency and price inflation was outlined and presented to the Board and the Fifth Committee on 14 March 2012, in annex IV of the Supplementary Information package No. 4. The Office of the Capital Master Plan will present the updated data during the sixty-seventh session of the General Assembly. The original budget of $1,876.7 million is fully committed and the commitment authority of $135 million is mostly committed at this point; therefore, changes in methodology are not feasible at this project phase.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2012

205. **In paragraph 81, the Board recommended that the Administration, when assessing the associated costs forecasts, take into account the full impact of the most recent scheduled completion dates.**

206. This control exists and will remain in place until the completion of the capital master plan project, as explained in the paragraphs below.

207. It should be noted that associated costs are approved by the General Assembly based on an addendum to the progress report of the capital master plan prepared annually by the Secretary-General. The addendum contains the most up-to-date information on projected costs at the time of its preparation, ensuring that these are

fully consistent with the timeline for the completion of the capital master plan project presented in the Secretary-General's report.

208. The Secretary-General's addendum contains detailed revised forecasts each year, which take into consideration the future projected associated cost requirements for all relevant departments and offices, as well as unutilised funds to be rephased from prior periods. Where delays in the capital master plan schedule affect associated costs, the forecast is adjusted accordingly by rephasing funds attached to affected projects into the relevant period. The report also contains detailed variance analysis of previous and anticipated expenditure against forecasts.

209. In addition to the annual reporting process described above, the Steering Committee on Capital Master Plan Associated Costs, chaired by the Under-Secretary-General for Management and with representation from each department and office with funding for associated costs, meets approximately every two months. At these meetings, the Committee discusses any changes to the capital master plan schedule and the implications on the expenditure for the current year and, towards the time of the preparation of the progress report, how they impact upon the future requirements yet to be approved by the General Assembly.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable

210. **In paragraph 91, the Board recommended that the Administration consider ways in which to use space more efficiently through, for example, "hot desking" and reduced physical filing space as a policy, and ensure a rapid conclusion aligned with the scheduled moves of staff and office furniture within the United Nations campus and other properties.**

211. Reference is made to the Administration's comments above relating to the recommendation in paragraph 83 of the Board's report for year ended 31 December 2011.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2015

212. **In paragraph 95, the Board recommended that the Administration establish a risk mitigation strategy to replace unexpected vacancies in critical positions within the Office of the Capital Master Plan management team at short notice.**

213. The Administration has already initiated a plan to retain core critical staff specializing in planning, designing, construction management and administration for the duration of the project. The Office of the Capital Master Plan, the Office of Human Resources Management and the Executive Office of the Department of Management are in the process of considering and developing special measures for the retention and placement of staff, as necessary.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium

214. **In paragraph 96, the Board recommended that the Administration consider whether a similar arrangement should apply to other teams involved in major business transformation programmes elsewhere in the United Nations.**

215. The Administration will use the lessons learned from the capital master plan and apply them to other teams involved in major business transformation programmes elsewhere in the United Nations.

*Department responsible*: Department of Management
*Status*: In progress
*Priority*: Medium
*Target date*: Fourth quarter of 2014

216. **In paragraph 103, the Board recommended that the Administration urgently review the effectiveness of the Post-Award Review Committee, with a view to streamlining its operation, and balance appropriately the need for assurance and control with the need to protect the project schedule and work of the Procurement Division.**

217. The reorganized Post-Award Review Committee has developed a risk-based approach to the review process. Using this approach, the Committee conducted review of 26 high-risk amendments to three contracts during three meetings held from March to May 2012. Three sets of minutes containing executive recommendation summaries were approved by the Assistant Secretary-General for the Office of Central Support Services on 31 May 2012, in addition to the two sets approved since 2010. On the same day, a note to the Assistant Secretary-General for the Office of the Capital Master Plan was issued transmitting the Committee's recommendations and proposing actions to strengthen internal controls.

*Department responsible*: Department of Management
*Status*: Implemented
*Priority*: Medium
*Target date*: Not applicable